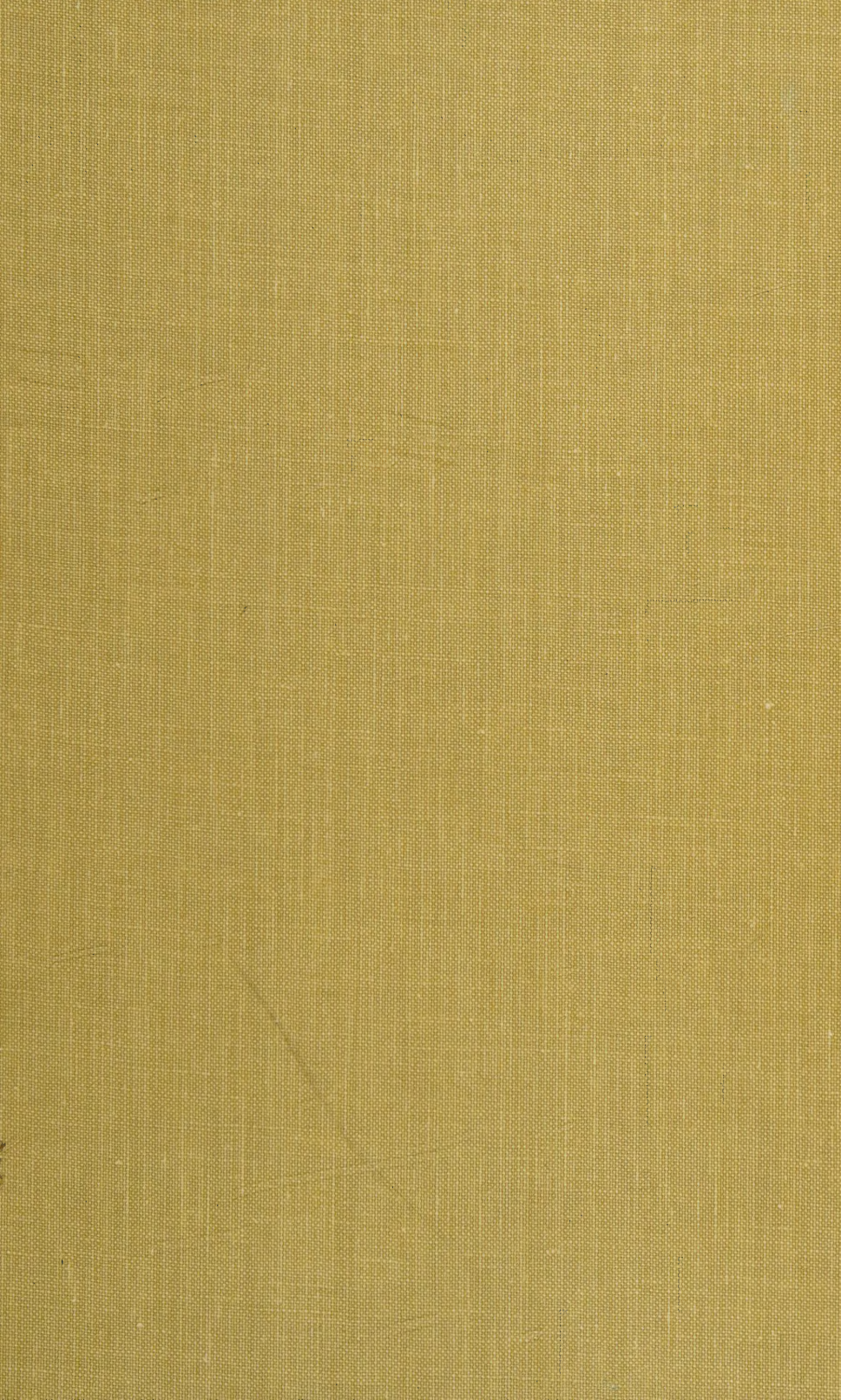




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The battle of the books in its
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THE BATTLE OF THE BOOKS IN ITS HISTORICAL SETTING

BY

ANNE ELIZABETH BURLINGAME
Assistant Professor of History, Hunter College

INTRODUCTION BY
JAMES HARVEY ROBINSON



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PREFACE

The little book here presented is the outgrowth of a design to trace through the writings of certain formative thinkers the development of a critical attitude toward classical authors in the seventeenth and early eighteenth centuries. At first interested in the more formal side of her topic, the writer became increasingly impressed with the contrasting attitudes of spirit manifested by attackers and defenders of ancient authority. This differing quality of spirit became at length the absorbing theme of her study, and gave to her conclusions their final form.

The writer wishes to express her abiding gratitude to Professor James Harvey Robinson, through whose inspiration and encouragement the work has alone been made possible. She feels deep obligation also to Professor William A. Dunning of Columbia University, whose kindly interest and scholarly criticism of her manuscript were of invaluable assistance. Her thanks are likewise due to President George Samler Davis of Hunter College, whose high devotion to cultural ideals has opened the way for her undertaking.

ANNE ELIZABETH BURLINGAME.

October, 1920.



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INTRODUCTION

This little volume is the story of an escape — the escape of the mind from an ancient prejudice. It seems to me both a fascinating and illuminating tale. It is not a series of literary reminiscences but an account of a fundamental emancipation with which the reader may profitably acquaint himself as a striking illustration of the manner in which the human mind grows, through the Old giving place to the New. This is a vital process to which we find it painful to reconcile ourselves at times. But Samuel Butler reminds us that "All our lives long, every day and every hour, we are engaged in a process of accommodating our changed and unchanged selves to changed and unchanged surroundings; living, in fact, is nothing else than this process of accommodation." This is a hard saying, for by nature we are for the most part and most of the time seeking our ease in comfortable routine; and accommodation requires thought and thought is likely to be laborious if it is good, for to accept new things we must wrench ourselves away from what we have hitherto approved and from what our fellows still approve. The history of man is the story of his reluctant and as yet highly imperfect *accommodation* to new knowledge

and new conditions produced by this knowledge — the age-long struggle between the Ancients and the Moderns.

During nearly the whole of man's career on the earth the Old and the True have been regarded as one and the same thing. Only a great revolution in his affairs could convince him that the New is likely to be the True. This revolution has been in progress for three hundred years at least. It is due to the application of new knowledge to human activity, — to the palpable alteration which we see going on about us of human aims and methods, and of the relations of men to one another. We live in the most flagrantly changeful age the world has ever seen, and the current innovations seem to be but harbingers of far greater and more bewildering novelties still ahead. Thus *accommodation* has become our very particular obligation, and in order to meet this obligation we must cultivate a flexibility of mind and mental agility and suppleness of an altogether different order from that of our predecessors.

The Greeks under peculiarly favorable circumstances first freed the mind from primitive acceptances and purely mythical explanations, and set unprecedented standards of philosophic freedom and scientific criticism. The work they did was so impressive, especially as it took form in Plato's Dialogues and in the all-embracing works of Aristotle, that later generations might well be forgiven for feeling that Plato had reached truths which no feeble

successor was likely to transcend, and that Aristotle had set down with inspired cogency pretty much all that it was within man's power to discover. So it came about that in the very beginning of critical and progressive intellectual life two supreme geniuses emerged whose findings appeared to those who were drawn to the one or the other to be final. In short, Plato and Aristotle became *authorities*. The Roman writers of all kinds were emulators and imitators of the Greeks, and so the Classical Heritage was built up and transmitted to posterity. The Christians were ready to forgive the stately Ancients for their religious blindness. It was not difficult to reconcile Plato with Christian theology — which indeed proves to have been largely determined by him. Aristotle's beliefs fell in readily enough with the anthropocentric scheme of things accepted by the mediaeval philosophers. He dominated the mediaeval universities, to be supplanted somewhat later among the Italian Humanists by Plato.

So long as the majestic classical literature was held to be authoritative it might forward thinking, but it surely hampered and confined it. Men had to escape from its thralldom before they could make the best use of it. This escape is the theme of the present little volume. The issue may seem remote and irrelevant to us now, but it is typical, and therefore of really vital and present importance. It was the first great conscious conflict between the Old and the New; the preliminary to successive emancipa-

tions; the instructive beginning of a process which must in the nature of things go on for a long time to come, until, at last, men's minds may grow really free to accommodate themselves readily and joyfully to the Ever-new.

The first distinguished thinker to win full detachment in the enjoyment of the classical Greek and Roman writers was Montaigne. He did not permit the Ancients to impose upon him. He was free to admit that Plato seemed infinitely futile to him at times, and that Cicero, like the herald in a court of law, cried "attention, attention" so vociferously that the reader was likely to be disappointed in the further proceedings. But he loved Plutarch and Seneca for their simple and varied good sense, as he would have esteemed the good judgment of a contemporary. He did not feel bound to respect a Greek or Roman writer as an authority or classic, but claimed the privilege of consorting with those he found companionable and avoiding those who bored him.

Lord Bacon was troubled by the feeble scientific and historical attainments of the Ancients and foresaw great things to come from freely looking about and thinking for ourselves. Descartes urged that it was best to begin all over again; and Galileo found it very easy to show, when he set to work, that the real operations of Nature had little in common with the teachings of the Aristotelians. So it came about that the New Science and the New Philosophy were

the first to fall afoul of the Ancients. Then Hobbes decried what seemed to him the perverse teachings of the Ancients in regard to the State and impeached their authority in Politics. Finally at the end of the seventeenth century the last stronghold of classical dominion was attacked, the supremacy of the Ancients in poesy and oratory, and the Battle of the Books was waged.

The reader will find in this volume a first hand account of the long conflict for liberty sketched above. Miss Burlingame has carefully brought together and skilfully arranged the vivid reports of the protagonists. Some readers will have looked at Bacon's *Advancement of Learning* and Descartes' *Essay* and Hobbes' *Leviathan*. More will probably be familiar with *The Tale of a Tub*. Very few are likely to have read a line of Wotton or Bentley, or made the familiar acquaintance of the inimitable Fontenelle. And even if one knows these writers he will not, in all probability, have studied them from the standpoint here represented.

The volume in hand depicts, as has been said, a cardinal emancipation. So long as the impressive heritage derived from the Greeks and Romans was in trust it could not be freely enjoyed. There had to be a great freeing of the scholar's spirit before we could have a Zeller, a Gilbert Murray, or an Alfred Croiset.

There is something within us that tends to rigidity and stratification, and this in the kind of a world in

which we live, makes for misery and disappointment, unless we consciously and tirelessly offset it. As Dreiser points out: "The caution sprung from somewhere, to keep an open mind is well grounded in Nature's tendency to change. Not to cling too pathetically to a religion or system of government or a theory of morals or a method of living, but to be ready to abandon at a moment's notice is the apparent teaching of the ages — to be able to step out free and willing to accept new and radically different conditions. This apparently is the ideal state for the human mind." Never was open-mindedness so essential as it is today. In no way can we acquire it so readily and naturally as by reviewing the struggles of earlier emancipators of the mind. Intellectual history strikes off the shackles of the past so gently that we find ourselves freed scarcely realizing how our change of heart has come about.

The very fact that this volume does not deal directly with the problems of the day makes it a refreshing relief. It is however no merely literary or antiquarian study, but a work of edification in the best sense of the word. As we read of the earlier struggles for intellectual freedom we should find ourselves heartened to play our part in that which is now in progress.

JAMES HARVEY ROBINSON.

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I

INTRODUCTION

Long did the mighty Stagirite retain
The universal intellectual reign,
Saw his own countries short-liv'd leopard slain;
The stronger Roman eagle did out-fly,
Oftener renew'd his age and saw that dy.
Mecha itself in spite of Mahumet possesst,
And chas'd by a wild deluge from the east,
His monarchy new planted in the west.
But as in time each great imperial race
Degenerates and gives some new one place —
So did this noble empire wast,
Sunk by degrees from glories past,
And in the Schoolmen's hands it perisht quite at last.
Then naught but words it grew,
And those all barbrous too.
It perisht, and it vanisht there —
The life and soul breath'd out became but empty air.

Abraham Cowley (1618-1667)

I

INTRODUCTORY CHAPTER

THE ATTITUDE TOWARD THE CLASSICAL AUTHORS DURING THE MEDIAEVAL PERIOD

To the student of the history of thought it sometimes appears that the story of the human race is one long account of the attainment of mental conceptions, and their subsequent relinquishment. Man masters a new intellectual world, and thereby enters a period of progress. But this is inevitably followed by an era in which he slowly grows out of the very acquisition he has so laboured to attain. An intellectual ideal is developed, or is rediscovered from the past. It prevails for a time, and is rapturously applauded for the inspiration it brings. By its measure standards are erected, and a tradition grows. Then, as time goes on, man, always the victim of his own illusions, loses the spirit of the ideal in its form. Of this he makes a fetish; and out of his early experiment he establishes a law. Mental retardation and ultimate stagnation follow. At last, in the fulness of time, some eager spirit less handicapped than his contemporaries, striving for an expression of his individual life, throws down the

gauntlet to custom. More timid souls follow, until a "movement" begins, and a life and death struggle between the old and the new ensues. History seems after all but the story of the war between the gods and the giants repeated over and over again.

The loss, rediscovery, and exploitation of the classical heritage of mankind is an instance of this truth. Lost, or lapsed into vague tradition during the Dark Ages; restored suddenly in Aristotelian form in the Century of Thomas Aquinas; welcomed by the awakening mind of Europe for its content of new information, the classical heritage speedily became to the Schoolmen a law, the violation of which was a cardinal intellectual sin. At that stage, just as learning in the universities was hardening into formulas, rebellious Roger Bacon and the irrepressible Petrarch challenged the whole scholastic system. War between the gods and the giants once more began. The struggle which followed prolonged itself until the seventeenth century, when a conscious and persistent attack upon the classical tradition developed. Extending from Francis Bacon to Fontenelle, it has reached almost into our own day.

To trace the growth of this critical attitude toward the classical writers during the seventeenth and early eighteenth centuries will be the chief purpose of this study. For the sake of clarity, we shall first briefly review those events in the mediaeval and early modern periods which form the background of the movement; in the later period we shall limit

ourselves to an interpretation of those personalities who gave the process its final form.

Throughout the mediaeval period the attitude of men toward the classical authors was one of well-nigh absolute acceptance. Scholars looked to the ancient writers as a reservoir of culture, and an authority in all forms of knowledge. They knew no other body of secular lore with which to compare it. There was therefore an absence of intellectual conflict between the classic literature and any world of thought outside of it. Such conflict as existed lay within, and grew out of differences between the spiritual ideals of Pagan and Christian readers. From the time of Augustine there developed a sense of disparity between the Pagan writings which dealt with the World of Satan, and the Christian writings which dealt with the World of the Spirit — "The City of God." Augustine's misgivings, Jerome's self-reproach, Isidore of Seville's restrictions upon the reading of his monks, are examples of this mood. But the attitude varied with the individual. At no time was it universal; and its existence did not prevent the use of the Pagan classics as a training for the students of the day. It is therefore by a study of this training that we may trace the effects of the Pagan authors upon mediaeval thought.

The two principal ways in which the classical writings influenced the mediaeval period were through their study as models of literary form, and their use as a source of philosophic thought. They were prac-

tically the only secular books of the early Middle Ages. The Latin language and literature predominated, Greek being almost unknown. The Latin writers, largely in the form of compendia, summaries and grammars, formed almost the only text-books of the day. During the early Dark Ages, the true understanding of literary content was lost, and emphasis was placed upon syntax and form. But in so far as the mediaeval scholar understood Pagan authors, they were his absolute authority in knowledge and good taste. A passing revival of appreciation for the content of classical literature occurred at the time of Otto the Great. A more vital one can be observed in France in the twelfth century. Chartres was the leader in the later movement, and became the center of so sympathetic a study of Latin literature that even English students were drawn thither. Thence the enthusiasm passed to Orleans and Paris. But from 1200 to 1250, the universities were taking shape, and in their curricula the study of classical literature was from the first crowded out. During the fourteenth century not a single Latin classic was prescribed in the universities of Europe; and of the whole period, the generation preceding Petrarch was the most barren in classical knowledge.¹ The causes of this indifference lie outside the province of our study. Yet it is not without reason that Petrarch laments the neglect of classical authors in his day.

The second principal channel through which the classical writers influenced the Mediaeval period was

philosophy. Classical literature was the source of most philosophic thought from Augustine to Descartes. All known philosophic theories filtered into the mediaeval mind from this great reservoir of ideas. All philosophic issues lay directly or indirectly within the classic complex. Other sources there were none. At the extreme close of the Classic Age, philosophic interest was eager but mystical, and Neo-Platonism prevailed. Plato, though but vaguely known by Augustine and Boethius, was believed by them to have been more spiritual than Aristotle, and therefore more Christian. At about 500 A. D. Boethius translated directly from the Greek the First Division of Aristotle's *Organon*, and *The Isagoge* of Porphyry. The discussion of universals in the latter work originated the mediaeval contest between Realism and Nominalism. Boethius thus became an authority upon Aristotle, and continued so throughout the Middle Ages. But in spirit he himself was wholly Platonic.² During the period from Boethius to Charlemagne philosophic interest died out. Christianity and ignorance alike made men indifferent to intellectual issues, and appreciation of classic learning was at its lowest ebb.

In the ninth century the translation into Latin of *The Celestial Hierarchy* of Dionysius the Areopagite,³ by John Scotus Erigena occasioned a slight revival of the issue between Plato and Aristotle. But philosophic interest was still too feeble to create a real enthusiasm; while the knowledge of Plato was

limited to a Latin translation of the *Timaeus*, together with extracts to be found in Augustine and Cicero. We may therefore say that from the sixth to the twelfth century almost no works of the great philosophic writers were available. The Greek language was practically unknown; philosophic thought but slightly rippled the surface of a life devoted to Christian asceticism and the preparation for an assured existence beyond the grave.

Such was the general condition of classical knowledge in Europe at the opening of the thirteenth century, when there occurred one of the most important intellectual events of the later Middle Ages. This was the recovery of the nearly complete works of Aristotle from the Greek. A new mentality had manifested itself from the twelfth century on. The fervour of realism as expressed through William of Champeaux gave evidence of new vigour in the old order of thought, while a nascent critical spirit revealed itself in Abelard. In the latter part of the twelfth century, the entire logical *Organon* of Aristotle in Boethius' translation was recovered by scholars in the West.⁴

But it was from an infidel source that Aristotle was finally projected upon the Christian world. The Arabian scholars had for four hundred years possessed knowledge of Greek. Translations of Euclid, Galen, and Aristotle had been made, sometimes from the original Greek, sometimes from Syriac versions

handed down to them by Nestorian Christians of an earlier date. This Arabic-Greek learning had been carried by the Moslems into Spain where an Islamic Aristotelian system of philosophy had grown up.⁵ There Averroes, the intellectual successor of Avicenna,⁶ had worked out his famous commentaries upon Aristotle. By the year 1200 Latin versions of some of Aristotle's works hitherto unknown in the west, began to appear in Paris. These were accompanied by the commentaries of Averroes. Within the following half century a great part of Aristotle's books were translated either from Arabic versions, or directly from Greek copies found in Constantinople.⁷ The inaccuracy of the translations caused discontent, even at the time; and a desire for improvement led to the monumental efforts of Albertus Magnus and Thomas Aquinas.

In the early stages of his advent the church had objected to Aristotle; but as it saw his growing power its objection weakened, and by the time of Thomas Aquinas, Aristotle had become the supreme authority in theology and science — "the Master of those that know." By 1255 many of his works were prescribed in the University of Paris; while the *Summa Theologiae* of Aquinas is the effort of a remarkable intellect to prove Christian theology and Aristotelian philosophy in essential harmony.

The modern thinker, as he looks back upon this obsession, is amazed. Yet its explanation is evident: to the uninformed thirteenth century mind, the

writings of Aristotle were a revelation of knowledge in logic, dialectics, metaphysics, and natural science. He opened to men's imaginations whole new fields of thought. Moreover he was without a rival; for the knowledge of Plato was slight, and there existed no other body of culture outside of the classical to take its place. Vernacular literature was as yet for the most part unwritten. Moreover, Aristotle coincided with the mood of the age. The Schoolmen clamoring for absolute authority found it in the prince of dogmatists. Yet however natural, the sovereignty of Aristotle was disastrous to learning. All progress looked backward to the ancient, not forward to new truth. A distorted conception of the philosopher, a hybrid of Averroistic ideas and unapprehended Greek terms, became the symbol of the classical tradition and an authority in Europe.⁸ Its entrenchment in Church and University rendered it well nigh invincible; while the persecution of all efforts to break down its tenets, caused an almost complete paralysis of creative thought.

The same century, however, which saw the consummation of classical authority in Aristotle, saw also the beginnings of revolt. The thirteenth century was the border ground between two great periods of thought. While it witnessed the complete victory of Aristotle in Church and University, and gave final expression to the mediaeval mood through Thomas Aquinas and Dante, it also saw the

beginnings of the growth of that spirit of activity and revolt which was ultimately to produce the scientific attitude and the modern world. This beginning of a critical and scientific spirit, coupled with an idea of progress, was the most vital and far reaching event in the intellectual life of the later Middle Ages. It is also intimately bound up with the history of a critical attitude towards the classics; for to it may be traced the origins of that revolt against the classical tradition and authority *per se*, which prolonged through a struggle of five hundred years was at length to free European thought from the sovereignty of Aristotle, and to release it from its bondage to the past. This revolt in its earlier phases from 1300 to 1500 expressed itself in three different ways.

Earliest of all, it took the form of a rebellion against the authority of Aristotle in all fields of knowledge, followed by a search for truth in nature and in independent thought. This phase was the embryonic beginnings of modern science; its early progress was obscure, intermittent, and abortive, and was marked by the travail and suffering of the projectors. Friar Roger Bacon and Peter of Maricourt, whom he has immortalized, are its most conspicuous examples. The former, a member of the Franciscan Order, combined in his nature a rebellion against the stereotyped and a devotion to truth which would in any age have predetermined for him a tragic life. Moreover, a prejudice against the Dom-

inicans — the most voluminous theological writers of the time — may have added to his zeal. However this may be, it is in his writings that we find for the first time the new note of unlimited progress. He was to some extent a man of science in revolt against accepted law. He believed that progress was impeded by a servile adherence to the authority of Aristotle as established by the Schoolmen, and that only by breaking from his tenets and turning to observation and experiment in nature could man advance. Men saw blindly as “bats in the twilight.” He argues that:

The study of wisdom may always increase in this life, because nothing is perfect in human discoveries. Therefore we later men ought to supplement the defects of the ancients, since we have entered into their labours, through which, unless we be asses, we may be incited to improve upon them. It is most wretched to be using what has been attained, and never look to that which is to be attained.⁹

It is when Bacon deplures “The infinite vices that proceed from pure ignorance,” that he touches most intimately the classical question. “Men are ignorant of Greek and Hebrew and Arabic; and therefore ignorant of all the sciences contained in these tongues; and they have relied upon . . . others as ignorant as themselves.” Aristotle’s texts and translations are corrupt; Aquinas’ interpretation is misleading.

The sciences in general are so badly translated that no mortal can really understand them, as I myself have learned

by sad experience. . . . Therefore, it would be better for the Latins if the wisdom of Aristotle had not been translated at all than translated so obscurely and corruptly.¹⁰ . . . Had I the power of disposing of these works, I would have them all burnt; it is a waste of time to study them; a source of error and of diffusion of ignorance greater than can be described.¹¹

The text of the Scriptures also is shockingly corrupt in the Vulgate copy at Paris. We are ignorant of the literal sense because of poor translation. To remedy all this, the study of the ancient languages, "the first door of Wisdom," must be pursued. Greek, Arabic, and Hebrew, must be learned. Texts must be amended and accurate translations made. The translator must know his subject as well as the language. With regard to the classics, we discern in the above three objective points: in the place of ancient authority must be substituted science through experiment; in the place of secondary manuscripts must be substituted sources; in the place of mutilated translations, accurate ones must be made. While out beyond it all in Bacon's mind lay the moral advance of humanity through intelligence.

Bacon was unappreciated in his day; he saw his labor pass without fruition. In some aspects of his nature, he had the limitations of his age. Yet, dying alone, obscure, in poverty, he left to the posterity of thought his immortal child—the book whose spirit of air and fire cannot die.

As Friar Bacon passed in France, there wrought

in Italy the man who first voiced the issue between vernacular and Latin speech. Hitherto men, disdaining the "vulgar" tongue, had respected only Latin as a literary language. But the supreme genius of Dante divined in the Italian an instrument adequate to express his noblest thought. Weighing Italian with Latin, Dante deliberately chose the former for his work. *The Divine Comedy*, *The New Life*, *The Odes*, and *The Convivio*, all were written in Tuscan; and in *The Convivio* and *De Vulgari Eloquentia* he defends its cause. He concedes the superior dignity and fixedness of Latin form, but declares that his "burning love" for Italian makes him "exult" to make clear "the excellence which it possesses in potentiality and in secret." Not only is it able to "manifest the thought concerned," but it is beautiful. Its detractors are those who "lack ability to handle it," and so "find fault with the material of their art"; or those who through abjectness of mind "affect an admiration of some tongue not their own."¹² Such are they who

Make up the detestable wretches of Italy who hold cheap that costly vernacular which, if it be vile in aught, it is only in so far as it sounds upon prostitutes' lips. . . . Not only love, but most perfect love of it abides in me. . . . For its excellence makes me its friend.

"Now we see that in all matters of speech, rightly to manifest its conception is the most loved and commended. This then is its most prime excellence."

Moreover, since language is the bond of human society, bringing men of the same race into relationship, the language of a country is a binding influence upon its people. Wherefore community of interest binds Dante to Italian; and "all his passion" is, to give to it "stability and glory"; in which unless he succeeds, his life work fails.¹³ Last of all, women, and those "who know not Latin," may be reached through it. The mother tongue then, "Shall be the oaten bread whereby thousands shall be sated. . . . This shall be the new light, the new sun, which shall rise when the wonted sun shall set, and shall give light to them who are in darkness and in shadow as to the wonted sun, which shines not for them."¹⁴

In his attitude Dante had no conspicuous contemporary sympathizer. Petrarch, a generation later, while he saw the issue, turned with disdain from the Italian sonnets of his youth to an exclusive use of Latin in mature life. During the century following the whole problem was temporarily submerged by Italian Humanism and the renewed enthusiasm for the classical tongues.

The intellectual class of the early Middle Ages, imbued with asceticism or restrained by Christian authority, had done what it could to deprecate and suppress those individual emotions which give life color, and render it at once an adventure and an enterprise. The later Middle Ages, restive under restraint, gave expression to its emotion in deeds

rather than words. Petrarch is the first distinguished scholar who makes articulate the new mood of reaction against inhibition and restraint. Petrarch was an expression of the modern spirit of individuality and emotion in conflict with the mediaeval ideal. His mind pushing out for escape saw but one road to self expression — the road to the vivid, classic past. He therefore turned to the Pagan authors as his only source of a more abundant life.

Looking out upon the world about him Petrarch saw stretching far and wide a huge structure of scholasticism. Under this lay buried the lost treasures of Roman life. Deeper still, Petrarch knew, lay the richer deposits of Hellenism. To restore this treasure became his ideal. Although he never was able to read Greek, and although his grasp of the Latin was limited by a mediaeval predilection for allegory and rhetoric, yet the classical writers were to him *alive*. The outcome of his labour was to usher in a widespread movement toward the recovery of classic thought.¹⁵ This enthusiasm extending from Petrarch through the early sixteenth century assumed in Italy primarily a literary form. Beyond the Alps it manifested a more religious phase. It was, as we have shown, a movement not causative but resultant, growing out of the effort of awakening Europe to find new life.

The generations following Petrarch saw the recovery and accumulation of those materials which

were to form the basis of humanistic culture. One by one precious manuscripts of lost Latin and Greek authors were recovered, copied, and preserved. Petrarch died in 1374, "leaning over a book as if sleeping." One hundred years later Aldus Manutius, whose service to the history of thought cannot be too highly commended, was planning his great enterprise, the Aldine Press. Between 1494 and 1515 all extant Greek authors were carefully edited and printed, their preservation being thus assured.¹⁶

Meantime an enthusiasm for Greek thought had been developed, and academies for its study established. Among these, the Florentine Academy founded by Cosmo de' Medici, and attaining its zenith under Lorenzo the Magnificent, is most important. Owing its inspiration to Gemistos Plethon, the Greek teacher whose long white beard and liquid accents gave his utterances a charm and dignity beyond human, the Academy developed into a center of Renaissance life. Born at Constantinople, trained at Brusa in the mystic lore of Mohammedan, Pagan and Jew, Gemistos became a judge at Mistra in the Peloponnese. Saddened by the corruption in Greek religion and politics, he built up an individual philosophy with which to restore mankind. It was made up of Pagan myth and Neo-Platonic ideas, including a slight element of Judaism. To the critical intellect, it was incredible; but to the mystic emotion, unsatisfied by reason, it made poignant appeal. In 1438 Gemistos visited Florence as a delegate of the

Eastern Church, and remained as a teacher of Greek. Florence, just reacting from scholasticism, with heart awaiting some new explanation of life's mystery, eagerly drank in his transcendental lore. Around Gemistos at the Court of Cosmo de' Medici, a Neo-Platonic Cult developed which reached full fruition under Lorenzo the Magnificent. Gemistos' *Treatise on Plato and Aristotle* ¹⁷ originated the bitter controversy over the two philosophers with which Cardinal Bessarion is associated. Among Neo-Platonists at Florence, Marsilius Ficinus and Giovanni Pico Mirandola are most significant. The former, trained from boyhood for the work of translating Plato, grew up devoted to a reconciliation of the Platonic and Christian ideal. Before his death he had translated all of Plato's writings, Plotinus, and *The Hierarchies* of Dionysius the Areopagite. But in spite of this zeal, Ficinus suffered from the limitation of his time. He did not understand Plato, and construed him only through Gemistos and Plotinus; while Plato's poetic myths — purely a by-product of his ideas — became to Ficinus the essence of his thought. This credulous and uncritical spirit is the keynote of the time. Its explanation is that the meaning of Greek philosophic terms was unknown to the Italians, and no substitute for them existed in their language. Yet Ficinus served a purpose in the history of thought. For through his work Platonic study was fostered, and the break with Aristotle made. ¹⁸

A second example of the mixture of culture and credulity in the period is found in Giovanni Pico Mirandola. Possessed of splendid presence and personality, he became the idol of Florence, while even today he appeals to us as the flower of the humanistic Renaissance. Pico believed that back of all warring systems — Pagan, Hebrew, Arabic, Christian, Scholastic — lay one fundamental Truth. To find that truth and through it to bring into harmony the Pagan and Christian tradition, became his aspiration. But with all his mental acumen, he saw but through a glass darkly; and the Jewish Caballa led him astray. Believing that it held the key to Greek science and Christian faith, he became ensnared in its endless mystic cipher. Dying at thirty-one, he left the dream of a great work unrealized. But he remains to the mind of the student the incarnation of all that was loveliest and most absurd in humanistic thought.

The classical Revival at Florence had thus transmuted into Neo-Platonism. In other parts of Italy, developing into a worship of finished Latin form, it again fell short of actuality. The fifteenth century was destined to close without the attainment of a real comprehension of Plato, or a decided understanding of Greek drama or prose. Hellenism with its freedom, its restraint, its sanity and beauty, still lay far beyond. But by the close of the fifteenth century, the Classical Renaissance in Italy, about to enter the harrowing period of the Italian Wars, had

reached its zenith, and the early sixteenth century saw it wane.

The Italian classical revival was in essence a looking backward, and at its best embodied a recovery of the past and its reunion with the present. It thus lacked any vital idea of progress to something better than the past. Despite the production of the finished type of scholar in individuals like Politian and embryonic critics like Valla, the movement in its later stages became sterile through a worship of classical Latin form, while the craze for the Latin language retarded the development of Italian begun by Dante. Owing to its devotion to form, its absorption in Neo-Platonism, and its inapprehension of many Greek terms, it failed utterly to recover the content of Greek philosophy as a whole. Although Greek literature was in part recovered and printed, intellectual interest centered in the post-classic philosophers and the church fathers.¹⁹ Little intimate contact with Greek poetry and literary prose resulted. Although the influence of Gemistos Plethon brought about the vogue of Plato and loosened Italy from the dogma of Aristotle, nevertheless the latter's entrenchment in Church and University left humanism a powerful enemy with which to cope, and one which later retarded or stamped out its most enlightened thought.²⁰ Thus the movement in the end became reactionary and abortive.

Nevertheless the Classical Revival in Italy served a purpose in the advancement of thought. It re-

stored to Europe a knowledge of the Greek language. It recovered, edited, and printed with accuracy and care the greater part of the Greek manuscripts, thus preserving them, and furnishing to later thinkers the tools with which to advance. It evolved and passed on to Northern Europe the design of a more liberal humanistic education, which eventually supplanted the cramped scholastic course.²¹ It handed down to posterity the conception of a freer life derived from Pagan culture. This idea served as a healthful antidote to the ascetic mediaeval attitude. In all of the above ways the Classical Revival in Italy furnished a foundation on which scholars beyond the Alps could build.

The opening of the sixteenth century which witnessed the decline of enthusiasm for classical literature in Italy, saw the further development of Humanism pass to leaders beyond the Alps. While the issues involved and the materials used were much the same, the spirit of approach and the purposes to which the men of Northern Europe applied their knowledge of the classics, were different. The humanists of the North, while varying individually, turned their faces from the past and even beyond the present, to the application of a knowledge of the classics to some future good. Their attitude involved a deep seriousness, and the thought of progress. But the source of this progress was to lie in the past. Their universal effort was to recover an

accurate knowledge of the language and literature of Roman, Greek, and Hebrew; but unlike the Italians who played with their knowledge, each thinker of the North had some especial ideal which he sought to further with this new instrument. In Germany the movement became largely submerged in theology and the Protestant Revolt. In France it emphasized classic form, and finally produced the literary era of Louis the Fourteenth. In England it transformed itself into an interest in religion and government, and lost sight of its original goal. In all of these countries, the throes of religious revolt caused the Church, aiming at her own self preservation and using the universities as agents, to oppose alike the "New Learning" and the nascent spirit of science. Moreover, the Protestant doctrines of Faith and Predestination with the dogmas involved, failed to produce an open attitude of mind.

The result was that in the conflict of ideas which followed, the subject matter and method of Aristotelian scholasticism remained entrenched in the universities and educational systems. A critical attitude toward the classical authors and the growing spirit of science projecting new theories of the universe, were alike looked upon with suspicion. The ensuing struggle prolonged itself throughout the sixteenth century, its first stage only, being completed then. As a result, the spirit of science and the concurrent recovery of an accurate knowledge of Greek literature and life, were hampered and deferred.

But the issue between Latin and Vernacular became more pronounced; for in Germany and England men appealed to the people in their native tongues. Nevertheless, leading Northern humanists of the sixteenth century achieved fair results, and the period as a whole saw advance. This fact may best be appreciated by a study of thinkers like Erasmus and Montaigne.

We have noted earlier, that the great difference between the classical revival in Italy and in Northern Europe was that south of the Alps men looked backward, while north of them they looked ahead. No man of his age so fully embodies the Northern viewpoint as Erasmus. No man to such a degree foreshadows modern ideas. Erasmus wished to utilize and to apply the classics as an approach to life, and thence to progress. His conception of progress differed from the modern, however, in that its source lay wholly in the ancient past, while its goal combined equally sound religion and sound reason. Erasmus' mission thus became not that of a religious teacher, but of a humanist scholar. Looking out beyond the turmoil and ignorance of his day, he discerned the possibility of a saner, more intelligent life, where narrow prejudice of sect and state should pass, and men should unite for common ends of good. It was not without reason that Erasmus termed himself "a citizen of the world"; for it was through the development of an international Republic of Letters — an Intellectual

World League — that he foresaw the fruition of his hopes. The assimilation of Greek and Latin literature, and through them the whole content of classical civilization, was to be the wonderful instrument, the harmonizing medium, of his plan. Sane classical culture, free from taint of sectionalism, must be conjoined with modern life. Men came into better ways of living, he believed, through intelligence. Therefore men must be educated. Aristotelian scholastics and Ciceronian eloquence must be put away, and Latin must be made a living tongue. Greek likewise must be learned; for in the Greek lay the ultimate sources of knowledge.²² Along with the emancipation of man from secular ignorance, the Bible must be set free.²³ Men must go back of secondary manuscripts to originals; back of formula to spirit; back of the Church Fathers to Christ. A critical use of Greek was to be the shining weapon of progress; and Erasmus' edition of the New Testament was to aid in its forging. Reform would come in gradual and peaceful evolution, if only men could grow in intelligence.

We note that Erasmus was in a measure limited by the views of his day. He failed to grasp the significance of science, or to realize that in the fresh observation of nature lay the key to growth. He did not glimpse the creation of another Thought World as good as the ancient, framed from science and vernacular literature. We know that he personally took little interest in the native speech of the

countries in which he lived. Yet he advocated that the Holy Scriptures be put into the languages of the people, and his application of a scientific spirit to classical manuscripts reveals an appreciation of the very method whose full bearing he could not see. Erasmus was lacking in poetic feeling also; and portions of the loveliest of Greek thought were lost to him. Terence was his favorite poet; Jerome his favorite Father. Yet limited though it was, his vision was a glorious one; and Europe and England seemed buoyantly advancing toward his goal, when right across the path there thrust itself the German Protestant Revolt. It was with Erasmus as with some seer and scholar at the dawn of the twentieth century, who holding glowing vision of world union and limitless progress through science, saw slowly rising before his eyes the vapours of that discord, which steadily increasing, became the dark tempest of European War; which first obscured, and then swallowed up the whole bright vision — obliterating his dearest hope.

It was in the person of Martin Luther, the miner's son of Eisleben, that those forces were gathering which were to turn the current of European thought. Luther, although not a humanist, was intimately connected with the cause of humanistic reform. For in all the early struggle of his mind for light his revolt against Aristotle and the Schoolmen had been strong. This hostility later became the conviction of his life. It was the revolt of the theologian

against an obstacle in his search for truth. Thus involuntarily and from individual motive, he became identified with a leading humanistic issue of his day. Luther's feeling toward the classical writers was mainly a by-product of his religion. What to scholars was an essential to him was an incident; and the interest he had felt for the classics in his youth, had been an interest in their content as an expression of life. He had never known that glowing enthusiasm which characterized the advocates of the "New Learning"; indeed as he grew older and became imbued with the zeal for religious reform, the classical authors lost significance to him, and became merely a means to an end. At Wittenberg he discarded Aristotle, Peter Lombard, and the Schoolmen, in order to make a direct approach to the sources. The Bible and the Church Fathers alone were to be authority, and all distorting media must be swept aside. But since the Bible and the Fathers had come down in Latin and Greek, a knowledge of these languages was essential in order to correct corrupted texts. Therefore Greek, Latin, and Hebrew should be studied in the universities. But only as a means to an end. They were "The sheaths which enclose the sword of the spirit, the shrine in which this treasure is carried, the vessel which contains this drink."²⁴ Far from being a humanist, Luther loved the German tongue. He despised "that pretty harlot, Reason." He chided "that little Greek," Melancthon, for being swept into an ardor for classical

thought. He grew increasingly cold toward Erasmus. Reuchlin did not command his sympathies, and *The Letters of Obscure Men* seemed to him trivial and slightly shocking in view of the extreme seriousness of life.

Fortune, however, makes strange bedfellows; and on the eve of the Protestant revolt, men of widely diverse views allied themselves. Humanism was the central eddy around which the currents of unrest converged. A united and independent German nation was the common denominator of their ideal. Von Hutten, the wandering scholar and patriot, favored Luther because Luther's reform signified independence of Rome and the hope of a united German state. But Hutten was not religious. Germany was his heart's love; and of them all he alone fully felt the possibilities of the German tongue. All the sins of the Roman Curia were recounted to the people in German verse.²⁵ "I wrote Latin formerly, which not everyone understands; now I call upon my Fatherland!"²⁶ Poignant and tragic as were Hutten's efforts toward a national state, his sufferings and obscure death—more significant still to the student of intellectual history is his growth beyond a dependence upon classical knowledge to a bold use of his mother tongue.

The English humanists were perhaps of all most able to make a happy adjustment between classical literature and life. Colet and Thomas More stand out as men who sweetly embody this condition. But

inevitably even here, the movement was deflected into theology and the pressing problems of the day. Classical culture assimilated by Colet transmuted into religion; while the same process opened to Thomas More a new political and social world. The *Utopia* contains utterances upon labour as penetrating as any since; but toward a more critical attitude with regard to the classics More did not advance. The troubles of Henry the Eighth's reign darkened the succeeding years and retarded the thought of the brilliant group of English humanists.

Erasmus' most dismal forebodings came true. Before his death, the religious conflict which he so shrinkingly apprehended had come. The emancipation from the classical tradition was thus deferred. But it may be by the law of compensation that the very breaking up of ordered things formed a stimulus to vivid ideas. Certain it is that the New Science found followers; and it was in a country most torn of all by dissension, whose sufferings seemed never to cease, that there appeared the first noteworthy spokesman of an utterly transformed view.

As one slips into the pages of Michael de Montaigne, one has a sense of coming home. We may walk happily with the earlier thinkers, and find comradeship. But withal a strangeness clings about their garments, and their utterances are mediaeval still. But Montaigne is no more mediaeval than are we, ourselves. His universe is one of indepen-

dent thought and variation; he is detached and he is free. "Not to establish Truth, but to seek it." "Among the Liberal Sciences let us begin with those that make us free!"

It is this buoyant freedom which forms the keynote of Montaigne's attitude toward classical literature and renders him its first modern reader. The Italians had adopted a theory of continuity, and had bridged over a break with the past; Erasmus had labored to restore the knowledge of a lost ancient life. But the efforts of both had been self conscious. Montaigne is unlike either. He loves antiquity, and in a way reveres it. But he accepts it lightly, as he accepts himself. He is released from mediaeval worship of authority, from Petrarch's love of rhetoric, and the later Italian venom of attack. He is innocent of a desire to apply the classics to religion or reform. Save for a slightly increased glamour over Rome, his classic world is ours of today. There is no isolated Past; there is no chasm to be bridged. These men are ourselves. We judge them as we judge ourselves.

Is it by nature, or through error of fancy, that the sight of the places which we know have been frequented and inhabited by persons whose memories are recommended in story in some sort works upon us?

Finding myself of no use in this age,²⁷ I throw myself back upon that other, and am so enamoured of it that the free, just, and flourishing state of that Ancient Rome . . . interests me to a degree of passion.²⁸

I have been bred up from infancy with these dead. I had knowledge of the affairs of Rome long before I had any of those of my own house; I knew the Capitol and its plan before I knew the Louvre; and the Tiber before I knew the Seine. The qualities and fortunes of Lucullus, Metellus, and Scipio have ever run more in my head than those of my own country. . . . I have had a hundred quarrels in defending Pompey, and for the cause of Brutus: this acquaintance yet continues betwixt us.²⁹

They are all dead; so is my father as absolutely dead as they, and is removed as far from me and life in eighteen years as they are in sixteen hundred; whose memory, nevertheless, friendship and society, I do not cease to hug and embrace with a perfect and lively union.

Again, "this very Rome that we now see," "who yet in her very tomb retains the marks and images of Empire," deserves to be beloved; for "the Ancient Times were the better times," and men of those days more able to judge than we.

Yet despite this affection, Montaigne's attitude is unbiased; it is free. He loves the classical writers in liberty, not servitude; and while his mind constantly reverts to them as to an exhaustless well of life he is severed from all bondage to their claim. He deplores the imitation of the Ancients, and the worship of ancient literature; he scorns subserviency to Aristotle, and the misprisal of the "vulgar tongue." He lets his "frolic fancy play."

This modern viewpoint of Montaigne's may be best appreciated by reading his essays upon classical

subjects. We note first that his very approach to these books is unique. He reads to please himself. "I do nothing without gayety." "If one book does not please me, I take another, and never meddle with any but at such times as I am weary of doing nothing." "I could wish to have a more perfect knowledge of things, but will not buy it so dear as it costs." He frankly admits, "I am not much for the new ones, because the old ones seem fuller and stronger; neither do I converse much with Greek authors, because my judgment cannot do its work with imperfect knowledge of the material."

Poetry, History and Philosophy are his favourite subjects. He loves poetry because it refines and elevates the emotion. "Poetry has ever had that power over me from a child to transpierce and transport me." "The true supreme and divine poetry is above all rule and reason." Virgil, Lucretius, Catullus, and Horace excel all the others. The *Georgics* are best of their kind. To the *Aeneids*, "the author might have given a little more of the file." Lucan and Terence also merit praise; the latter being "liquid and like a crystal stream." We note here that Montaigne seems unfamiliar with Greek verse, to which he alludes rarely and usually through Latin citations. The Italian poets, in particular Ariosto, do not please him. "They mount on horseback because they are not able to stand on their own legs." Whereas, "The best of ancient poets have avoided affectation, and hunting after

. . . fantastic Spanish and Petrarchal elevations." In simplicity lies beauty to Montaigne.

In Prose, "that mixes a little more profit with pleasure," history and philosophy are his favourite subjects. Each is to him a well of life. He draws no line between ancient and modern books, but sweeps all into one wide grasp. There is no issue between Latin and vernacular literature; each are selected from at will. His criticism is modern and free. He has reached the wide horizon where, independent of time and language, a great thought is a great thought still. "The historians are my right ball; for they are pleasant and easy, and where man in general, the knowledge of whom I hunt after, appears more vividly and entire than anywhere else." Plutarch, Diogenes Laertius, and Caesar rank highest of the Ancients; while Einhardt, "Honest Froissart," and De Comines excel among Moderns. Thucydides and Xenophon are unmentioned as historians,³⁰ and Tacitus was read only late in life. His comments upon history show keen critical faculty and a modern point of view. He enjoins a discriminating spirit. "The more excellent sort of historians have judgment to pick out what is worthy to be known." He demands a technical knowledge of the matter to be written. "What can a man expect from a physician who writes of war, or from a mere scholar treating of the designs of princes?" Moreover, Montaigne scores the efforts of literary historians: "as if we were to learn Grammar from

them"; and requires first hand knowledge. "The only good histories are those that have been written by the persons themselves, who held command in the affairs whereof they write." He disparages Guicciardini who "leaves nothing unsaid," and Monsieur du Bellay, who suppresses the truth. He regrets that Tacitus omitted so much of the human in his lives of the Emperors. "'Tis rather a judgment than a deduction of History; 'tis a nursery of ethics and politic discourse. . . . 'Tis full of sententious opinions right or wrong."

In all of the above comments, we discern traces of the modern critical spirit. This likewise is true of his attitude with regard to the classics in education. History, Poetry, and Philosophy are alike invaluable; but the method of teaching them in his day is wrong. The classics should be used not to exercise the memory, but to train the mind. "The advantages of our study is to become better and more wise." Let the schoolmaster sweep away the principles of Aristotle, and appeal to the individual mind. "Truth and reason are common to everyone." "Who follows another, follows nothing, finds nothing, nay is inquisitive after nothing." "Let him at least know that he knows." "Who ever asked his pupil *what he thought* of Grammar and Rhetoric, or of such and such a sentence in Cicero? Our masters stick them full feathered in our memories, and there establish them like oracles." "To know by rote is no knowledge." History should be used, therefore,

to train the judgment, to enrich the thought, and to give one true perspective.

This great world . . . is the mirror wherein we are to behold ourselves, to be able to know ourselves as we ought to do in the true bias. . . . So many great names, so many famous victories and conquests drowned and swallowed up in oblivion render our hopes ridiculous of eternising our names by the taking of half a score of light horse, or a hen-roost which only derives its memory from its ruin.³¹

As history should train the judgment, ancient philosophy should "instruct us how to live." "She has virtue for her end." She is not as the Schoolmen say, "placed upon a rock apart, amongst thorns and brambles . . . a hobgoblin to affright people"; but she is "seated in a fair, fruitful and flourishing plain, from whence she easily discerns all things below."³² "Away, then, with the thorny subtleties of dialectics; they are abuses; things by which our lives can never be mended: . . . Take the plain philosophical discourses; learn how rightly to choose."³³ . . . 'Tis not a soul, 'tis not a body we are training up, but a man."³⁴

Unlike most men of his age, Montaigne advocates in education the Modern languages before the Ancient. "I would first understand my own language and that of my neighbours, with whom most of my business and conversation lies." "Words are to serve and to follow a man's purpose; and let Gascon come in play where French will not do." . . .

"No doubt Greek and Latin are very great ornaments, but we buy them too dear." He approves the translation of classical works into vernacular, and especially commends Jacques Amyot for rendering Plutarch into French. "We dunces had been lost, had not this book raised us out of the dirt." He regrets that the same author did not also translate Xenophon. Montaigne, however, makes the Bible one great exception to his rule. Unlike Erasmus, he believes that it should be kept apart.

We ought not to mix God in our actions, but with the highest reverence and caution; that poesy is too holy to be put to no other uses than to exercise the lungs and to delight our ears. . . . It is not fit that a printer in his shop, amongst his vain and frivolous thoughts should be permitted to pass away his time and divert himself with such sacred things. 'Neither is it decent to see the Holy Book of the Holy Mysteries of our belief tumbled up and down a kitchen. . . . Neither is it a book for every one to fust, but the study of select men, set apart. . . . Are they not then pleasant men who think they have rendered this fit for the people's handling by translating it into the vulgar tongue? Does the understanding of all therein contained only stick at words? . . . A pure and simple ignorance was far more learned and salutary than all this verbal knowledge, which has only proved the nurse of temerity and presumption. . . . The very women and children nowadays take upon themselves to lecture the oldest and most experienced men.³⁵

Montaigne, then, in education recommends the classics as a key to Reason. But having reached the

farthest bound of thought, he points to the closed door. The Bible and religion lie beyond.

Montaigne turned to the ancient philosophers for an explanation of the universe as a man today turns to science. In this he was of his age. Yet nowhere does he show greater independence of spirit and a more open mind. In his scepticism of authority, he is the precursor of Descartes. The theories of the great philosophers are pebbles on a sunny shore. He plays with them and tosses them all away. Cicero is "too long winded"; good enough "for children and common people, to whom a man must say all, and see what comes of it." . . . "We can say, Cicero says this; these were the manners of Plato; these are the very words of Aristotle, but *what do we say ourselves?* A parrot would say as much." ³⁶ Of Cicero's remarks upon Letters—"Hear this poor calamitous animal huff. . . . Does not this man seem to speak of the condition of the everliving almighty God? Yet as to the effect, a thousand little country women have lived lives more equal, more sweet, and more constant than his." ³⁷

As to "the Divine Plato"—"Will the license of the time excuse my sacrilegious boldness if I censure the dialogism of Plato himself as also dull and heavy, too much stifling the matter." And again: "The beginning and the end of knowledge are equally foolish: observe to what a pitch Plato flies in his poetic clouds; do but take notice of the gibberish of the gods." ³⁸ Likewise,—“And what of the Epi-

cureans? . . . who fain added a fortuitous and lateral motion, and furnished their atoms with hooked tails, by which they might unite and cling to one another!" As for Aristotle, "the God of scholastic Theology," "the Prince of Dogmatists," "he may be false as another." "Authority has alone power to work upon common understandings, and it is of more weight in a foreign tongue."³⁹ Why are not Plato's ideas, or Epicurus' atoms . . . or Leucippus' vacuum just as good? . . . "Or any opinion of the infinite confusion of opinions and determinations which this fine human reason produces?"⁴⁰ Moreover, the "Cannibals . . . enjoy the happiness of a long, quiet, and peaceable life without Aristotle's precepts, and without the knowledge of the name of Physics."⁴¹

Among all the philosophers, Socrates was truest in his life; while Plutarch and Seneca are most sane. "Their instruction is the very cream of philosophy." But even they are fallible; Seneca labors too hard to avoid evil, while Plutarch is sometimes absurd.⁴²

Having "with frolic forwardness" tossed all ancient theories aside, Montaigne propounds one of his own.

Let us see if we have a little more light in the knowledge of human and natural things.⁴³ . . . I accept kindly and with gratitude what Nature has done for me: am well pleased with it, and proud of it. A man does wrong to the great omnipotent Giver of all things to refuse, annul, or disfigure His gift; all goodness Himself, He has made

everything good.⁴⁴ . . . 'Tis an absolute, and as it were, a divine perfection, for a man to know how loyally to enjoy his being. We seek other conditions by reason we do not understand the use of our own; and go out of ourselves because we know not how there to reside.⁴⁵ . . . The fairest lives in my opinion are those which regularly accommodate themselves to the common and human model; without miracle, without extravagance.

After this declaration of intellectual conviction, Montaigne settles back comfortably into the bosom of the Church. In this action, there is no sense of conflict or hypocrisy. For he approaches philosophy with his intellect; but he takes his religion as a man takes a wife — on faith.

To Montaigne, science is a phase of philosophy. It is not a reality, but a theory and a by-product. From his point of view to that of Francis Bacon's is a far cry. Gregory the Thirteenth's reform of the calendar is an irritation;⁴⁶ inventions are a bore. "We make a mighty business of the invention of artillery and printing, which other men at the other end of the world in China had a thousand years ago." Copernicus' theory of the solar system is not really new.⁴⁷

The heavens and the stars had been three thousand years in motion; all the world were of that belief, till Cleanthis the Samian . . . bethought him to maintain that it was the earth that moved. . . . And in our time Copernicus has so grounded the doctrine that it very regularly serves to all astrological consequences; what use can we make of this

except that we do not much care which is the true opinion? And who knows but that a third a thousand years hence may overthrow the two former? . . . Before the principles that Aristotle introduced were in reputation, other principles contented human reason, as these satisfy us now. They, too, may be thrust out of doors.⁴⁸

It is with this sweeping sense of diversity through Time and Change, that Montaigne leaves us at the last. Janus-faced, he looks two ways. Into one gaze he draws the glory of the Ancient Past he loves; with the other, intellect escaping finite limitation, blithely pushes out through the Open Door.

II

THE SCIENTIFIC PHASE

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IN the visions of each dynamic thinker of the seventeenth century, there is a constructive and a destructive aspect. In almost each case his constructive purpose involves the advancement of knowledge through science, while his destructive attitude is connected with a critical approach to the classical writers who had in earlier days been accepted at face value. The fundamental question was always presenting itself, whether or not the ancient learning and the ancient writers should continue to furnish the final authority in human progress; or whether there existed some better method, some more advanced truth awaiting to be discovered and applied to life.

In 1592, with undaunted spirit, yet in sadness, despairing for humanity and war-torn France, Montaigne closed his career. But one generation later, as Francis Bacon at the opening of the seventeenth century entered into the service of young King James the First of England, a new spirit was abroad. War for the time had ceased. Science and geography were making great discoveries. And as one dips into the high impassioned thoughts of Bacon, the

sense of change, of transition to new worlds, is imminent. As one follows Bacon's glowing passages, one has vision of a horseman standing on a mountain peak — his trumpet poised — a roseate hue of dawn along the line of sky, and a far limitless country stretching off beyond. "*Sum Buccinator!*" Bacon exclaims. And such to succeeding ages, with his clear, clarion call to progress — a herald of the modera era of thought he has become.

The time was ripe for the messenger of this great change. The scientific achievements of Copernicus, of Galileo, of Bruno, of Harvey and Kepler,¹ had stirred men's blood and given promise of new mastery of physical law. The great geographical discoveries had quickened their imaginations, and opened up whole new worlds of material conquest and advance. Although the full significance of science had not yet impressed men's minds, its ferment was stimulating their thought; while they felt the same glowing hope for the future stirred by geographical discovery, that men at the dawn of the twentieth century before the Great War felt for the achievements of science. One hundred years later that hope had seen discouragement and semi-defeat.² But for the moment, to men of high thought, the curtain seemed lifted from the finitude of life, and no enterprise appeared impossible to the lofty of heart.

It is Francis Bacon of a truth who becomes the trumpeter of this change; for it is he who first renders articulate the sense of the continuity of life

and progress through science, and of man's capacity for advance step by step, and on and on.³ In all mental growth, it is the attitude of spirit which counts. For while a man's opinions may be determined by the age in which he lives, the vital question remains, is his spirit flexible and open? Does he seek truth, and is he untrammelled to receive? This high attitude was Francis Bacon's to the full. To summon mankind to advance through science, to proceed step by step, to apply each gain to the betterment of "man's estate," became the unfaltering purpose of his life. His plan aimed at no dogmatic finality. Over and over he tells us that he is but a beginner; that later generations must complete what he has inaugurated.

For I am but a trumpeter, not a combatant. . . . Nor is mine a trumpet which summons and excites men to cut each other to pieces with mutual contradictions; or to quarrel and fight with one another: but rather to make peace between themselves, and turning with united forces against the nature of things, to storm and occupy her castles and strongholds, and extend the bounds of human empire.⁴

Again:

My purpose . . . is to try whether I cannot in very fact, lay more firmly the foundations, and extend more widely the limits of the power and greatness of man. . . . Yet I have no entire or universal theory to propound. For it does not seem that the time is come for such an attempt. . . . But hold it enough if in the intermediate business, I bear

myself soberly and profitably, sowing in the meantime for future ages the *seeds of a purer truth*, and performing my part towards the commencement of the great undertaking.⁵

Bacon realizes that the goal proposed lies far beyond his personal reach.⁶ He realizes, too, the hopelessness of its immediate attainment. He knows, likewise, that only steadfastness of spirit can live down the animosity his undertaking will entail. Yet he chooses deliberately to break from the intellectual fetters of his age; he consecrates himself to his task; he calls upon contemporary workers to assist; he foresees emancipation — far off — at the end. “Then shall we no longer be kept dancing in little rings like persons bewitched, but our range and circuit will be as wide as the compass of the World.”⁷

For my own part at least in obedience to the everlasting love of Truth, I have committed myself to the uncertainties and difficulties and solitudes of the ways, and relying on the divine assistance, have upheld my mind both against the shocks and embattled ranks of opinion, and against my own private and inward hesitations and scruples, and against the fogs and clouds of Nature, and the phantoms flitting about on every side, in the hope of providing at last for the present and future generations guidance more faithful and secure.⁸

Of myself I say nothing; but in behalf of the business which is in hand, I entreat men that it is not an opinion to be held but a work to be done; and to be well assured that I am labouring to lay the foundation not of any sect or doc-

trine, but of human utility and power. Next I ask them to deal fairly by their own interests, and laying aside all emulations and prejudices . . . to join in the consultation for the common good.⁹

Having thus declared his purpose and called humanity to be his helper, Bacon propounds his plan and method of advance. I have illustrated at some length the spirit of his work, because it is in this that we find the key-note to the whole seventeenth century transformation. Moreover, it is this new attitude towards knowledge which is intimately bound up with the development of a critical attitude toward the classical writers. For both Bacon's ideal of intellectual reform and the concrete method he projects, involve an indirect attack upon the whole foundation of classical thought and learning as conceived by the scholars of his day.

If we turn back for a moment to Montaigne and the writers before him, we shall perceive the contrast and discern the new issue. Montaigne's interest centered in the individual; in humanity; in the sources of its joys and woes. His approach towards life was philosophic; and most often he drew his matter from the great storehouse of classical literature. While his criticism of the classics was free, yet the issue made by him was always the uses to which they were put, and the method in which they were treated. There had not apparently entered into his mind a conception of any thought-world equally good or better, nor of its possible substitu-

tion for the world of the past. But with Bacon, the transformation has come. It is upon nature, upon inductive science, and the progress of humanity in general that Bacon builds. And although he speaks with moderation, proposing "to ground a sociable intercourse between Antiquity and Proficiency," yet time and again he reveals the prescience that his plan of reform will entail the sweeping away of old established things connected with the ancient writers.¹⁰ For the sake of "God's first creature, which was Light: to have Light," and for the furthering of "The Kingdom of Man," he worked. And throughout his writings the substitution of a new regime of thought in place of the old is frankly suggested and discussed.

It is Bacon in the full flush of enthusiasm attacking the old, that we encounter in *The Advancement of Learning*, 1605. It appeared well for the interests of Bacon that Elizabeth was gone; for, "Tho she cheered him much with the bounty of her countenance, yet she never cheered him with the bounty of her hand."¹¹ James the devotee of learning had ascended the throne. Bacon backed by excellent family might hope for better days.¹² *The Advancement of Learning*, published two years after James' accession, is its author's Declaration of Faith and his Apostles' Creed. Never again did he issue statements quite so colorful and vivid; never again was his spirit quite so bold. Yet the view there given its mature expression had its origin in his youth. For

"At the age of about sixteen while still in the University," Rawley explains, he "first fell into the dislike of the philosophy of Aristotle; not for the worthlessness of the author to whom he would ever ascribe all highest attributes, but for the unfruitfulness of the way; being a philosophy (as his Lordship used to say), only strong for disputations and contentions, but barren of the production of works for the benefit of man. In which mind he continued to his dying day." ¹³

It is this early critical attitude developed and augmented by mature life, which we find in *The Advancement of Learning*. In Book I Bacon is concerned chiefly with the fallacies of learning. All of these are intimately connected with the tradition which had resulted from the mediaeval mind reacting upon the Classics. Bacon approaches this tradition not with the sentiment and reverence of earlier writers, but in a questioning spirit. We hear censured the devotion to ancient knowledge; the worship of its authority; the use of Aristotelian dialectic; the adherence to accepted books instead of observation; the reluctance to concede advance upon the past. In short Bacon sweepingly arraigns the whole classical tradition as conceived and practised by the schools of his time.

The *Second Book of the Advancement* and *The Organon* explain the substitute which our author proffers in place of the old. Although the present study admits only a discussion of those phases con-

nected with classical authorities, even in this respect, Bacon's ideas are revolutionary. He does not scruple to state boldly his objections to all previous and present conditions of knowledge; nor does he hesitate to declare his absolute faith that the "Third Great Period" of learning which he aspires to usher in, will far excel that of any earlier time.

In discussing this topic Bacon lays stress upon the faulty courses of study in the colleges of his day, and upon defects in our system of knowledge as inherited from the Greeks. Under the former caption he declares that "Governors in the Universities have neglected to consider whether the readings, exercises, and other customs appertaining unto learning anciently begun . . . be well instituted or no." As a result, "Princes find a solitude in regard to able men because there is no education Collegiate which is free, where such as were so disposed might give themselves to histories, modern languages, books of policies, and civil discourses, and other like emolument in the service of the state."¹⁴

Moreover a reverence for antiquity prevents accuracy of research. "For as things now are, if an untruth in nature be once on foot, what by reason of the neglect of examination and countenance of antiquity . . . it is never called down."¹⁵

It is, however, in estimating the defects in our heritage of knowledge from the Ancients that Bacon becomes most original and interesting. Here he dwells almost wholly upon the Greeks, referring but

rarely to the Latins. We note how unlike was his intellectual temper to the theological fervor of the Mediaeval scholiasts, or the rhetorical zest of the Italians. Neither does he strike the personal note of Montaigne. Bacon takes small cognizance of the Greeks as to their literary value, or the human content of their writings. Greek poetry does not enthrall him, although he occasionally quotes Pindar or Homer, the latter of whom he seems to reverence. Greek drama he rarely mentions. Plato as a poet he admires. "For it is a most beautiful emblem, that of Plato's cave." And the Greek myths he loves.¹⁶ But here again, it is the allegory which allures him; while his only lengthy discussion of verse is devoted to form and meter. Although he refers approvingly to Thucydides, the Greek historians do not hold his attention. His interest in the characters depicted is not warm and human like Montaigne's, but he is drawn to them as a scientist interested in a study of nature or ethics. In short, "Hellenism," that essence of liberty and beauty as we today conceive the term, had not entered into his soul. Classical literature is to Bacon a work shop of science, a laboratory of ideas, an impersonal place.

It is therefore as one might expect, that his comments upon classical writers are almost wholly devoted to philosophy, while his investigation is directed to an estimate of their contribution to human knowledge.¹⁷ Even his approach is scientific and modern; for he speaks critically and guardedly.

"The Ancients are to be received cautiously and with proper selection. For the lapse of time makes many alterations, so that what in respect of time appears ancient is by reason of the confusion which it makes, and its inconformity to the present state of things, really new."¹⁸ Moreover, Bacon censures the ancient philosophers for retiring from active life and its "perturbations" in order to philosophize. "Their honour," he protests, should be "of stouter web." This statement reveals the modern preference for an active rather than a contemplative life.¹⁹

Bacon's reflections upon Greek philosophical knowledge dwell upon the many fallacies in tenet and method; its lack of productivity; and the overwhelming ignorance of the Greeks about many facts of common information at a later day. His discussion reveals an amazingly wide range of reading and a familiarity with philosophical writers both early and late. Yet his voluminous reading has but impressed him with the profusion of books and the sterility of matter. Likewise he censures the static nature of the knowledge contained therein.

For let a man look carefully into all that variety of books with which the arts and sciences abound; he will find everywhere endless repetitions of the same thing, varying in the method of treatment, but not new in substance, insomuch that the whole stock, numerous as it appears at first view, proves on examination to be but scanty. And for its value and utility it must be plainly avowed that that wisdom which we have derived principally from the Greeks is but

like the boyhood of knowledge, and has the characteristic property of boys: it can talk, but it cannot generate; for it is fruitful of controversies but barren of works. . . . For in like manner the sciences to which we are accustomed have certain general positions which are specious and flattering; but as soon as they come to particulars, . . . when they should produce fruit and works, then arise contentions and barking disputations, which are the end of the matter and all the issue they can yield. Observe also that if sciences of this kind had any life in them, that could never have come to pass which has been the case for many ages — that they stand almost at a stay, without receiving any augmentations worthy of the human race; insomuch that many times not only what was asserted once is asserted still; but what was a question once is a question still, and instead of being resolved by discussion, is only fixed and fed; and all the tradition and succession of schools is still a succession of masters and scholars, not of inventors and those who bring to further perfection the things invented.²⁰

Among the Greek philosophers, Bacon holds the earliest to be the best. For they adhered most closely to nature, and set out to discover truth through experiment. But they applied no rule to their tentative induction, and were soon beguiled from experiment to “hard thinking and perpetual exercising of the mind.” This class did not, so far as we know, open schools but betook themselves “more silently, severely and simply to the inquisition of truth.” “Still even they were not altogether free from the failing of their nation; but leaned too much to the ambition and vanity of founding a sect

and of catching popular applause." ²¹ Of them all, Democritus was most worthy; for he wandered least from "the path of Nature"; "did not suppose a mind or reason in the frame of things," and adhered most closely to "the particularities of physical causes." Of the later philosophers all are fallacious; Plato, Aristotle, and Galen seek for final causes in Nature instead of in Metaphysics, while they confuse and mingle this subject with Natural Science.

In connection with the above comment, one notes that for the first time, consciously or unconsciously, a decisive line is drawn between Philosophy and Natural Science. For the first time attention is directed to the fundamental difference, and the issue made clear. In emphasizing this distinction Bacon makes the transition from the mediaeval philosophic to the modern scientific method. On the one side he places intellectual theory; on the other, assured knowledge through experiment with nature.

We have as yet no natural philosophy that is pure; all is tainted and corrupted: In Aristotle's School by logic, in Plato's by natural theology, in the second school of Platonists, such as Proclus and others, by mathematics, which sought only to give definitions to natural philosophy, not to generate or give it birth. . . . From a natural philosophy pure and simple, better things are to be expected.²²

"Nothing duly investigated is to be found in natural history." Aristotle's *History of Animals*

was collected "to supply the understanding with information for the building up of philosophy." ²³

The induction which is to be available for the discovery and demonstration of sciences and arts, must analyse nature by proper rejections and exclusions; and then, after a sufficient number of negatives come to a conclusion on the affirmative instances. . . . In order to furnish this induction or demonstration well and duly for its work, very many things are to be provided which no mortal has yet thought of; insomuch that greater labor will have to be spent in it than has hitherto been spent on the syllogism. . . . And it is in this induction that our chief hope lies.²⁴

Not only did the material and method of Greek science lack clarity and completeness, but Greek ignorance of facts common to modern knowledge was colossal. Bacon grows eloquent in giving expression to this defect:

Nor does the character of the time and age yield much better signs than the character of the country and nation. For at that period there was but a narrow and meager knowledge either of time or place; which is the worst thing that can be, especially for those who rest all on experience. For they had no history worthy to be called history that went back a thousand years; but only fables and rumours of antiquity. And of the regions and districts of the World, they knew but a small portion; giving indiscriminately the name of Scythians to all in the North, of Celts to all in the West; knowing nothing of Africa beyond the hither side of Ethiopia, of Asia beyond the Ganges; much less were they acquainted with the provinces of the New World, even by

hearsay or any well founded rumour; nay a multitude of climates and zones wherein innumerable nations breathe and live, were pronounced by them to be uninhabitable; and the travels of Democritus, Plato and Pythagoras, which were rather suburban excursions than distant journeys, were talked of as something great. In our times, on the other hand, both many parts of the New World and the limits on every side of the Old World are known, and our stock of experience has increased to an infinite amount. Wherefore, if (like astrologers) we draw signs from the seasons of their nativity or birth, nothing great can be predicted of those systems of philosophy.²⁵

Again:

It is well to observe the force and virtue and consequences of discoveries; and these are to be seen nowhere more conspicuously than in these three which were unknown to the Ancients, and of which the origin, tho recent, is obscure and inglorious; namely, printing, gunpowder, and the magnet. For these have changed the whole face and state of things throughout the world; the first in literature, the second in warfare; the third in navigation; whence have followed innumerable changes; insomuch that no empire, no sect, no star, seems to have exerted greater power and influence in human affairs than these three mechanical discoveries.²⁶

The final defect of Greek science, Bacon considers to be its sterility: it has been unproductive of works.

Now the true and lawful Goal of the sciences is none other than this: that human life be endowed with new discoveries and powers.²⁷

Of all signs there is none more certain or more noble than that taken from fruits. . . . Now from all these systems of the Greeks, and their ramifications . . . there can hardly after the lapse of so many years be adduced a single experiment which tends to relieve and to benefit the condition of man.²⁸

Since the signs of truth both in fruit and progress are wanting in the Old Learning, Bacon challenges that some great New World of knowledge must be entered into and mastered for the human race. As he surveys the manifold defects of the old system, it is not strange that he feels amazement that humanity has borne with it so long; or that he marvels that some earlier thinker has not originated a straighter road to truth.

And an astonishing thing it is to one who rightly considers the matter, that no mortal should have seriously applied himself to the opening and laying out of a road to human understanding direct from the sense by a course of experiment orderly conducted and well built up; but that all has been left either to the mist of tradition, or the whirl and eddy of argument, or the fluctuations and mazes of chance and of vague and ill digested exercise.²⁹

Since preceding thinkers have failed of this undertaking,

There was but one course left, therefore, to try the whole thing anew, upon a better plan, and to commence a total reconstruction of sciences, arts, and all human knowledge raised upon the proper foundations. And this though in the

project and undertaking it may seem a thing infinite and, beyond the powers of man, yet when it comes to be dealt with, will be found sound and sober, more so than what has been done hitherto. For of this there is some issue; whereas in what is now done . . . there is only a whirling roundabout, and perpetual agitation ending where it began. And although he [the writer] was well aware how solitary an enterprise it is, and how hard a thing to win faith and credit for, nevertheless he was resolved not to abandon either it or himself; Nor to be deterred from trying and entering upon that one path which is alone open to the human mind.³⁰

And certainly it may be objected to me with a truth that my words require an Age; a whole age perhaps, to prove them, and many ages to perfect them. But yet as even the greatest things are owing to their beginnings, it will be enough for me to have sown a seed for posterity, and for the Immortal God.³¹

Nor does Bacon lack assurance; but with prescient vision, he beholds rising before him man's future estate.

And surely when I set before me the condition of these times in which learning seems to have now made her third visitation to men; and when at the same time I attentively behold with what helps and assistance she is provided; as the vivacity of and sublimity of the many wits of this age; the noble monuments of Ancient writers, which shine like so many lights before us; the art of printing which brings books within reach of men of all fortunes; the opened bosom of the ocean and the world traveled over in every part, whereby multitudes of experiments unknown to the Ancients have been disclosed and an immense mass added to Natural

History; the leisure time which the greatest wits in the kingdoms and states of Europe have everywhere at their disposal, not being so much employed in civil business as were the Greeks in respect of their popular governments and the Romans in respect of the greatness of their monarchy; the peace which Britain, Spain, Italy, France too at last, and many other countries now enjoy; the consumption and exhaustion of all that can be thought or said on religious questions, which have so long diverted men's minds from the study of other arts . . . and lastly the inseparable property of time, ever more and more to disclose the Truth; I cannot, I say, when I reflect on these things, but be raised to this hope, that this third period will surpass the Greek and Roman Learning; if only men will wisely and honestly know their own strength and their own weakness; and take from one another the light of invention and not the fire of contradiction, and esteem the inquisition of truth a noble enterprise and not a pleasure or ornament; and employ wealth and magnificence on things of worth and excellence, not on things vulgar and of popular estimation.³²

The Classical Man looked to a solution of the problems of the universe through the divinity within himself; the Mediaeval Man sought it at the hands of his anthropomorphic God; Francis Bacon followed it on the path of Science. Science was to him the secret of power; experiment was the open road to its attainment; and it was the structure of classical tradition which was challenged to make way for the progression. Bacon speaks always as a scientist: he claims the right of criticising ancient knowledge;³³ he disdains a reference back to its

authority to justify himself.³⁴ He enjoins observation of nature, and censures scorn of common things. Even his conception of a new and universal language "the most beautiful of all," is scientific.³⁵ Moreover, Bacon is scientific in retaining the useful in the old while he aspires to the new. He therefore does not discard deduction, but retains it for secondary work.³⁶ Last of all, he is scientific in his goal. For "by progressive stages of certainty," he proposes to arrive out beyond meticulous experiment at a universal system of Truth. Nor can the objections often made against him hold, that he "discovered new scientific worlds, but did not conquer them"; and that while pointing the way to new knowledge, he was oblivious to the advance of the Old. The first criticism is but to blame him for failure to accomplish in a lifetime what it required a century to complete. One might as well censure Columbus for not circumnavigating the globe. Indeed Bacon himself foresaw this comment: "And a like judgment I suppose may be passed on me in future ages that I did no great things, but simply made less account of things that were accounted great."³⁷

The second criticism is but to imply that Bacon was human, suffering the limitation of a finite mind. Although he did not grasp the significance of Copernicus' solar theory or Harvey's circulation of the blood; although Galileo's law of acceleration³⁸ and Napier's logarithms seem to have been unknown to him, nevertheless his absorption in his own

work explains this astigmatia. We know that other thinkers equally great have been as blind.³⁹ Indeed it seems to be by man's engrossment in a single field that truth advances.

Not because of these limitations, but in spite of them, Bacon stands as the forerunner of that proud group of master scientists whose brilliant achievements seemed before the Great War to justify their confidence in material science as the key to progress. But in an estimate of their work, it must be remembered that it was the clarion call of Bacon which shook to its foundation the dark tower of Tradition, and made free the way. It was not without significance that this great leader died in the early morning⁴⁰ of Easter day; and our thoughts revert to him at that last moment as at the beginning of his career, standing with bugle poised, and prescient eyes, about to welcome in the dawn.

Unless the student of classical iconoclasm adhere rigidly to his path, he is drawn into the history of Science. For hand in hand with revolt against ancient dogma went the investigation of natural law. Among scientists whose influence, though indirect, was vital to the growth of classic criticism, Galileo stands supreme. Since his work was constructive and experimental rather than critical, it may not be recounted fully here. Yet two phases of it are closely related to classical tradition and are an essen-

tial part of its story. Indeed had a knight-errant of inductive reasoning arisen at the call of Bacon, Galileo might have been he; for in him we find the experimenter *par excellence*. Since his goal was the ascertainment of truth in Nature, classical literature to him as to Luther became a by-product; and as Luther in his search for a true theology, encountered Authority, so Galileo came upon it in his investigation of natural law. Working at Pisa under the patronage of Cosmo II, he grew convinced that Aristotle's theory of the law of falling bodies was erroneous. Experimenting on the Leaning Tower, and later at Padua, he completely controverted the old hypothesis of acceleration and weight.⁴¹ This work indirectly weakened the whole Aristotelian system of mechanics, thus injuring classical prestige. Continuing his investigation while Professor of Mathematics at Padua, Galileo constructed the famous telescope with which he discovered the satellites of Jupiter. In a little book, *Siderius Nuntius*, published at Venice in 1610, he joyfully announced the tidings and pointed out their significance in relation to the Copernican theory.⁴²

In all of the above work Galileo's criticism of classical literature had been incidental to his observation and experiment. In 1632, however, he gave to the public a discourse in Italian which directly challenged the Schoolman's deference to Aristotle and the ancient written Word.⁴³ It pitilessly, though good humouredly, exposed the fatuity of those stupid

but well-intentioned persons who think to controvert attested phenomena in Nature with a quotation from a book. It proclaimed the reign of Words as passed, and an era of Reality as ushered in. So vivid and so modern is this emphasis that one wonders if in Galileo Fontenelle found inspiration.⁴⁴ Moreover, Galileo goes farther and challenges the sixteenth century interpretation of the Stagirite's ideas.⁴⁵ He declares that were Aristotle himself alive, he would exhibit more good sense than his commentators, and would not fail to accept the testimony of his own eyesight. He intimates that it is not Aristotle's writings, but their absurd misconstruction by admirers that handicaps progress. He satirizes the blind reverence and deference to Authority cloaked in the Written Word. He pictures the Peripatetic's dismay when robbed of his "Guide." Last of all with consummate skill he lays bare the fatuous habit by which the unintelligent sweep all new opinions into the fold of intellectual anarchy. It is interesting and somewhat surprising to note that although these feelings must have generally prevailed at the beginning of the seventeenth century, no critical philosopher had given them incisive expression.⁴⁶ Even on the title page of his book, Galileo proclaims his mood. For after the proud designation, "Galileus Galileus Linceus, A Gentleman of Florence," there runs the legend, "*Inter nullos magis quam inter philosophos esse debet aequa libertas.*"

No more sympathetic interpretation of Galileo could be given than that in the quaint old English translation by Thomas Salusbury, (1661).⁴⁷ So vivid is it, and so replete with collateral information, that one feels a sense of personal loss in realizing that nearly all the copies of *Tome the Second* (1665) were destroyed in the great London fire. So full of sturdy vigor is the atmosphere which penetrates this dusty old volume, that one pauses to wonder if with the passing of illusion something beautiful has not perished from the earth.

Salusbury explains that at the request of "several of my noble and learned friends . . . who rather want time or patience to look into the vulgar and unstudied languages, I did adventure upon this work."

Galileo, Kepler and those other worthies in learning are now brought before you in English, having changed their Latine, Italian and French, whereby they were almost strangers to our nation. . . . The flegm that is predominant in my Constitution joyned with a nine-years' converse in these Languages, . . . has promoted the work. The book being for subject and design intended chiefly for gentlemen, I have been as careless of using a studied pedantry in my style as careful in contriving a pleasant and beautiful impression.⁴⁸ . . . These profound Dialogues have been found so uneasy to Translate that neither affectation of novelty could induce the French, nor translating humour persuade the Germans to undertake them.⁴⁹

One may fittingly introduce Galileo's brilliant *Dialogue* with Salusbury's account of its inception and fate:

The first Book which offers itself to your view in this Tome is that singular and unimitable piece of reason and demonstration, *The Systeme of Galileo*. The subject of it is a new and noble part of Astronomy, to wit, the doctrine and hypothesis of the mobility of the earth and the stability of the sun; the history whereof I shall hereafter give you at large in the life of that famous man. Only this by the by: that the reader may not wonder why these Dialogues found so various entertainment in Italy (for the reader cannot but have heard that though they have been with all veneration valued, read, and applauded by the judicious, yet they were with much detestation persecuted, suppressed, and exploded by the superstitious) I am to tell him that our author having assigned his intimate friends Salviati and Sagredo the more successful Parts of the Challenger and Moderator; he made the famous Commentator Simplicius to personate the Peripatetic. The Book coming out, and Pope Urban VIII taking his honour to be concerned as in his private capacity being very positive in declaring against the Samian Philosophy, and now (as he supposed) being ill-dealt with by Galileo who had summed up all his arguments and put them into the mouth of Simplicius; his holiness thereupon conceived an implacable displeasure against our author, and thinking no other revenge sufficient he employed his apostolical authority, and deals with the Consistory to condemn him and prescribe his book as heretical; thus prostituting the censure of the Church to his private revenge.⁵⁰

In an introduction to "Judicious Readers" prefacing his *Systeme*, Galileo declares his purpose:

To this end I have personated the Copernican in this Discourse, proceeding by an hypothesis purely Mathematical; striving by all artificial ways to represent it superior, not to that of the immobility of the earth absolutely, but according as it is mentioned by some that retain no more but the name of Peripatetics, and are content, without going further to adore Shadows.⁵¹

After the Dialogue has opened, and Salviati has spoken jestingly of Peripatetic ideas, Simplicius protests.

Pray Salviatus, speak with more respect of Aristotle: for who can you ever persuade that he who was the first, only, and admirable explainer of the syllogistic forms of demonstration . . . should afterwards so notoriously equivocate in imposing that for known which is in question.⁵²

Again, when Salviati attempts to show Simplicius that the differences assigned to "Coelestial and Elementary" bodies are not natural, but Aristotelian, Simplicius exclaims:

This manner of argumentation tends to the subversion of Heaven and Earth, and the whole Universe; but I believe the fundamentals of the Peripatetics are such that we need not fear that New Sciences can be erected from their ruins.

Whereupon Salviati retorts:

Take no thought in this place for Heaven or the Earth, neither fear their subversion, or the ruins of philosophy. . . .

As for the Earth, we strive to ennoble and perfect it, whilst we make it like to the Coelestial Bodies, and as it were, place it in Heaven, whence you philosophers have exiled it. Philosophy itself cannot but receive benefit from our disputes, for if our conceptions prove true, new discoveries will be made. . . . For as to the Science itself, it cannot but improve.⁵³

Unconvinced, Simplicius reveals the same blind reverence for authority in his reply:

I cannot suffer my ears to hear it questioned whether generation and corruption be *in rerum natura*, it being a thing which we have continually before our eyes, and whereof Aristotle hath written two whole Books.

To this attitude of adulation for Aristotle's "*Ipse Dixit*," Salviati answers that men have now come to an era when new facts controvert old opinions:

I affirm that we have in our age new accidents and observations, and such that I question not in the least but if Aristotle were now alive, they would make him change his opinion. . . . If Aristotle had seen spots [on the sun] that far excel not only the Mediterranean streight but all Africa and Asia, also, what think you he would have said and done, Simplicius? . . . Hold a little, good Simplicius, this modern author what saith he to the new stars Anno 1572 and 1604, and to the solar spots? . . . And you, Simplicius, what answer could you give to these importunate spots?⁵⁴

Salviati next points out that if the dispute were over some point of law or other part of the "studies

called Humanity," "wherein there is no truth or falsehood," acuteness of wit and citation of words might prove the argument. But here language does not avail. For

In Natural Sciences . . . one is to be more cautious, how he goeth about to maintain anything that is false; for a man of an ordinary intellect if it be his good fortune to be on the right side, may lay a thousand Demosthenes and a thousand Aristotles at his feet.⁵⁵ . . . Now we by the help of the telescope are brought thirty or forty times nearer to the Heavens than ever Aristotle came; so that we may discover in them an hundred things which he could not see.⁵⁶

At this stage of the discussion Sagredius the Moderator interposes, and with delicious sarcasm illuminatingly sums up Simplicius' bewilderment:

But on the other side, when he considers the great authority which Aristotle hath won with all men, and remembereth the great number of famous interpreters which have made it their business to explain his sense, and seeth other Sciences so necessary and profitable to the public, to build a great part of their esteem and reputation to the credit of Aristotle, he is much perplexed; and methinks I hear him say: To whom then should we repair for the decision of our controversies, if Aristotle were removed from the chair? What other author should we follow in the Schools, Academies and Studies? What Philosopher hath writ all the parts of Natural Philosophy and that so methodical without omitting so much as a single conclusion? Shall we then overthrow that fabric under which so many passengers find shelter? Shall we destroy that asylum, that prytaneum, where in so

many students meet with commodious harbours, where *without exposing ourselves to the injuries of the air, with the only turning over of a few leaves*, one may learn all the secrets of Nature? Shall we dismantle that fort in which we are saved from all hostile assaults? ⁵⁷

Salviati in reply scores one more point against the mediocre mind:

There is no danger that so great a multitude of subtle and wise philosophers should suffer themselves to be hectored by one or two who make a little blustering; nay they will rather, without ever turning the points of their pens against them, by their silence only render them the objects of universal scorn and contempt. It is a fond conceit for anyone to think to introduce a new philosophy by reproving this or that author: it will be first necessary to new-mold the brains of men, and make them apt to distinguish truth from falsehood, a thing which only God can do.⁵⁸

Indeed, Salviati declares, some of the Peripatetics go so far as to assert that the invention of the telescope was taken from Aristotle; while Sagredius asserts that the chemists constantly read into ancient poetry the way to make gold.⁵⁹ When Simplicius reproaches them for speaking with too little respect of the great Philosopher, Salviatus at length losing patience, retorts by asking him if he is so simple as not to realize that Aristotle would have been more displeased with the doctor who made him author of the telescope than with those who laughed at that folly.

Do you question whether Aristotle, had he but seen the novelties discovered in Heaven, would not have changed his opinion, amended his books, and embraced the more sensible doctrine; rejecting those silly gulls which too scrupulously go about to defend whatever he hath said, not considering that if Aristotle were such a one as they fancy him — he would be a man of intractable wit, an obstinate mind, a barbarous soul, a stubborn will, that accounting all men else but as silly sheep, would have his oracles preferred before the Senses, Experience, and Nature herself? ⁶⁰

Sagredius then caps Simplicius' discomfiture with the exclamation:

Ah, unheard of sordidness of servile souls to make themselves willing slaves to other men's opinions; to receive them for inviolable decrees,— what is this but to make an Oracle out of a Log and to run to that for answers, to fear that, to reverence and adore that? ⁶¹

When poor, subdued Simplicius mildly questions whom then they should take as guide, Salviati adjures:

We need a guide in unknown and uncouth ways, but in champion places and open plains, the blind only stand in need of a leader; and for such it is better that he stay at home. But he that hath eyes in his head and in his mind, him should a man choose for his guide. And what is more shameful than in the midst of publick disputes whilst one person is treating of demonstrable conclusions, to hear another interpose with a passage of Aristotle, and not seldom writ to quite another purpose, and with that to stop the mouth of his opponent? . . . Therefore Simplicius . . . bring us no

more Texts and naked authorities; for our disputes are of the Sensible World, and not on paper.⁶²

Despite the *verve* of the discussion, Dialogues three and four conclude rather hopelessly. Salviati believes that prejudice is difficult to dislodge; that the confidence people have in their own apprehensions is sublime; that men are not open to reason, but in argument fix in mind the favored conclusion, and then argue toward that.⁶³ He concludes that the "pure Peripatetics" will not relinquish their obsessions, but laughing at the sunspots and their phenomena, will remain intrenched in their present views.⁶⁴

Although episodal in relation to Galileo's fundamental field of service, *The Systeme of Two Worlds* must be counted an important influence in the growth of classical criticism. To one only who has traced the whole movement can its significance be fully apparent. For by its use of the vernacular and its attack upon the Authority of Words, it gives bold expression to those opinions which one has discovered lurking unspoken in the minds of kindred but more timid thinkers. Moreover, the work undoubtedly had strong influence upon Descartes, the logical successor of Francis Bacon.

There exists no more fascinating occupation than the study of the history of thought. It appeared after the glowing passages of Bacon that nothing more concerning Classical Learning remained to be

said. Yet as we turn a generation later in France to the cold, colourless pages of Descartes, the same old problem confronts us — the same Castle Terrible awaits to be destroyed. While to the reader of Bacon, Descartes seems a foregone conclusion, nevertheless there is in the French philosopher's approach to his subject much which marks a different stage of thought, and renders his ideas interesting and new. In Descartes we find for the first time a writer whose approach to the classics does not merely approximate, but is, essentially, the modern. Bacon's spirit had been scientific; but mingled with pure criticism was a reverence for the past, and a desire to do it justice. His tone toward classical literature was as towards a heritage in his father's house. Moreover, he built upon it as a foundation. With Descartes on the other hand, we find an impersonal, objective attitude. Without reverence, without emotion, save apprehension of the Jesuit Order and the Church, he stands aloof and estimates the value of classical study. The test which he applies to it is pure reason; failing to meet which it must go.

We find also in Descartes a different set of emphases and values from the old. With him, there no longer exists the earlier feeling that ancient learning is the great storehouse of culture, and that unlimited time devoted to it is well spent. While as with Bacon, nature has supplanted the classics as a source of physical knowledge, there has in addition formed in Descartes' mind the idea of a New World

of intellectual activity as a rival of the Old. This latter is made up of contemporary life, language, and literature, and a participation in actual affairs. There comes into view through Descartes that long succession of later thinkers who believe that for every moment spent upon the classics we lose some portion of the Present,—the question being which is the better worth while.

Indeed Descartes has reached that moment in the history of thought where all acquisition from the Past is regarded merely as a training, a process, a means to an end.⁶⁵ The test applied to it, is its contribution to judgment, the elimination of prejudice, and the use of reason. But the question has also presented itself to him whether or not a study of the classics is the surest method by which to attain to reason. This he is inclined to answer in the negative; but in the end, leaving the problem unsolved, he affirms a conviction that by whatever process a man arrive, the time must come in mental maturity when he sweeps aside his scaffolding, and rests his structure upon reason alone.

In justification of classical study, yet aware of its dangers, he remarks,

To study the writings of the ancients is right because it is a great boon for us to be able to make use of the labours of so many men, and we should do so both in order to discover what they have correctly made out in previous ages, and also that we may inform ourselves as to what in the various sciences is still left for investigation. *But yet there is great*

*danger lest in a too absorbed study of these works, we should become infected with their errors, guard against them as we may.*⁶⁶

To reveal his appreciation of ancient culture, while at the same time pointing out that it may lead to a neglect of modern thought, he says:

I did not omit, however, always to hold in esteem those exercises which are the occupations of the Schools. I knew that the languages which one learns are essential for the understanding of all ancient literature; that fables with their charm stimulate the mind, and histories . . . exalt it; and that when read with discretion, these books assist in forming a sound judgment. I was aware that the reading of all good books is indeed like a conversation with the noblest men of past centuries . . . nay, a carefully studied conversation in which they reveal to us none but the best of their thoughts. . . . But I considered that I had already given sufficient time to languages, and likewise even to the reading of the literature of the Ancients. . . . For to converse with those of other centuries is almost the same as to travel. It is good to know something of the customs of different people in order to judge more soundly our own. . . . *But when one employs too much time in traveling one becomes a stranger in one's own country; and when one is too curious about things which were practised in past centuries, one is usually very ignorant about those which are practised in one's own time.*⁶⁷

To make clear his conviction that a knowledge of the classical writers is not essential to a full intellectual life, he declares:

A good man has no need to have read every book, nor to have carefully learned all that which is taught in the Schools; it would even be a defect in his education were he to have devoted too much of his time to the study of letters. There are many other things to do in life, and he has to direct that life in such a manner that the greater part of it shall remain to him for the performance of good actions which his own reason ought to teach him, even supposing that he were to receive his lessons from it alone.⁶⁸

A little later to show that he regards classical training as unessential to good reasoning, he writes, "A man with a healthy mind, had he been brought up in the desert and never received more than the light of Nature to illumine him, could not if he carefully weighed all the same reasons, adopt an opinion different from ours."⁶⁹ Indeed, Descartes says repeatedly that the training of the Schools may even be a handicap: "It may easily be observed in those who are known as pedants, that it renders them less capable of reasoning than they would have been had they never learned at all." . . .⁷⁰ "Of those who commenced with the Ancient Philosophy, the more they have studied it, the less they are fitted rightly to apprehend the truth."⁷¹

At length the moment arrives when the French philosopher places before us the possibility of the attainment of a body of knowledge accurate and full, yet independent and devoid of any contribution from the Past:

It is now some years since I detected how many were the false beliefs that I had from my earliest youth admitted as true, and how doubtful was everything I had since constructed on this basis; and from that time I was convinced that I must once for all seriously undertake to rid myself of all opinions which I had formerly accepted, and commence to build anew from the foundation.⁷²

In order to examine into the truth, it is necessary once in one's life to doubt of all things so far as this is possible.⁷³

He answers the question as to whence the new body of knowledge may come:

Intuition is the undoubting conception of an unclouded and attentive mind, and springs from the light of reason alone.⁷⁴
. . . . The first principles themselves are given by intuition alone, while on the contrary, the remote conclusions are furnished only by deduction.⁷⁵ . . . For how often do we not see that those who have never taken to letters give a sounder and clearer decision about obvious matters than those who have spent time in the Schools?⁷⁶

Nothing can be added to the pure Light of Reason that does not in some way obscure it.⁷⁷

A third phase of Descartes' thought which differs from earlier philosophers, is with regard to the public to whom he makes his appeal. We recall that the summons of Bacon was sent to scholars everywhere. In order that he might reach Catholic and Protestant alike, he translated his earlier works into Latin and eliminated all references to disturbing religious topics. Thus he showed that in the World of Scholars lay his hope. Descartes on the

other hand avowedly issues his plea to the Public at Large. For this reason, like Bruno and Galileo in Italy, he wrote in his native tongue; and he referred judgment not to the scholastic recluse, but to the intelligent thinker everywhere. Thus he widened the boundaries of the intellectual world.

"And if I write in French which is the language of my country," he says at the close of his *Discourse on Method*, "rather than in Latin which is that of my teachers, that is because I hope that those who avail themselves only of their natural reason in its purity may be better judges of my opinions than those who believe only in the writings of the Ancients; and as to those who unite good sense with study, whom alone I crave for my judges, they will not, I feel sure, be so partial to Latin as to refuse to follow my reasoning because I expound it in a vulgar tongue." ⁷⁸

Last of all, Descartes' personal reaction upon classical learning — the angle at which he regarded it through his own particular "Idol of the Cave" — differentiates him from his predecessors. For the fundamental cause of Descartes' defection from the Past was its failure to produce accurate knowledge. Since Descartes was a mathematician, his mind demanded accuracy. Repeatedly he criticised the classical sciences for vagueness and obscurity; repeatedly he reproached them for offering abstractions in the place of definite thought.⁷⁹ And when finally he declared open revolt and swept aside the whole

ancient accumulation, his first step thereafter was to search out and establish a method by which to arrive at accurate conclusions. His next effort was — using this method as an instrument — to build up a System of Systems of assured truth.⁸⁰ In this revolt from vagueness and insistence upon exactness, Descartes strikes the keynote of modern scientific scholarship as distinguished from the classical and mediaeval.

As we read the tranquil utterances of the French writer, and then contemplate the bold and limitless change those utterances involve, we are astonished at the point to which he has conducted us. For that structure of Classical Tradition which Bacon's weapons had pierced through and through, Descartes with a gentle motion of his hand has swept utterly aside. Not a stone is left, and the builder must begin anew.

The edifice which Descartes constructed in place of the ancient, his *Discourse on Method* reveals. And since no more lucid account of the growth of thought than the author's own could be given; and since it relates how step by step he evolved a substitute for the ancient theories of learning, we may summarize it here. Descartes divides his *Discourse* into six portions, and in each presents some phase of the process through which he came to examine and discard old beliefs. In part the first, setting out to tell us how he became dissatisfied with the sciences, he declares,

I shall be very happy to show the paths I have followed, and to set forth my life as in a picture, so that everyone may judge it for himself.⁸¹

I had been nourished on letters from my childhood, and since I was given to believe that by their means a clear and certain knowledge could be obtained of all that was useful in life, I had an extreme desire to acquire instruction. But so soon as I had achieved the entire course of study at the close of which one is usually received into the ranks of the learned, I entirely changed my opinion. For I found myself embarrassed with so many doubts and errors that it seemed to me that the effort to instruct myself had no effect other than an increasing discovery of my own ignorance. And yet I was studying at one of the most celebrated schools in Europe, where I thought that there must be men of learning if they were to be found anywhere in the world. I learned there all that others learned; and not being satisfied with the sciences that we were taught, I even read through all the books which fell into my hands treating of what is considered most curious and rare. . . . This made me take the liberty of judging all others by myself, and of coming to the conclusion that there was no learning in the world such as I was formerly led to believe it to be.⁸²

Notwithstanding this conviction, Descartes tells us, he continued to hold in esteem the exercises of the Schools. He gave appreciative consideration to Languages, Fables, Histories, Eloquence, Poesy, Mathematics, Morals, Theology, Philosophy, Jurisprudence, and Medicine. But despite some merit in each, he found defects which outweighed its value. He felt that although fables charm and stimulate,

they cause one to imagine the impossible as real; and while histories exalt the spirit they exaggerate facts, and lead to the extravagance of knight errantry and romance.

Of kindred subjects, Descartes continues:

I esteemed Eloquence most highly, and I was enamoured of Poesy. But I thought that both were gifts of the mind rather than fruits of study. Those who have the strongest power of reasoning and who most skilfully arrange their thoughts in order to render them clear and intelligible, have the best power of persuasion, even if they can but speak the language of Lower Brittany, and have never learned Rhetoric. And those who have the most delightful and original ideas, and who know how to express them with the maximum of style and suavity would not fail to be the best poets even if the art of Poesy were unknown to them.^{ss}

Mathematics delighted him because of its "certainty"; yet he was astonished that it had advanced so little in the past. Likewise ancient morals seemed to fall short of fruition.

I compared the works of the Ancient pagans which deal with Morals, to palaces most superb and magnificent which are yet built on sand and mud alone. They praise the virtues most highly, and show them to be more worthy of being prized than anything else in the world; but they do not sufficiently teach us to become acquainted with them; and often that which is called by a fine name is nothing but insensibility, or pride, or despair, or patricide.

I shall not say anything about Philosophy, [he continues] but that seeing that it has been cultivated for many centuries

by the best minds that ever lived, and that nevertheless no single thing is to be found in it which is not subject to dispute, and in consequence which is not dubious, I had not enough presumption to hope to fare better than other men had done. And also considering how many conflicting opinions there may be regarding the selfsame matter all supported by learned people . . . I esteemed as well-nigh false all that only went as far as being probable.

As to the other Sciences, inasmuch as they derive their principles from Philosophy, I judged that one could have built nothing solid on foundations so far from firm.

That is why, Descartes asserts, "As soon as age permitted me to emerge from the control of my tutors, I entirely quitted the study of letters."

Our adventurer then turned for knowledge to *The Great Book of the World*. For it seemed to him that he might "meet with much more truth in the reasonings that each man makes on the matter that specially concerns him, and the issue of which would very soon punish him if he made a wrong judgment, than in the case of those made by a man of letters in his study touching speculations that lead to no result." But after he had employed several years in observing the manners of other men, and had found in them "nothing to give him settled convictions," he at length resolved to set them aside, and to make himself an object of study, employing "all the strength of his mind in choosing the road" he should go.

Descartes was in Germany when he formed this

resolution; and he relates how he remained one whole day alone, shut up in a stove-heated room, seeking for light. At length, "As regards all the opinions he had up to this time embraced, he resolved to sweep them completely away." "But like one who walks alone in the twilight," he determined "to go slowly"; and before substituting a new foundation for the old, to seek out a "True Method" by which to advance. In his search, he turned first to Logic and Mathematics. But he found that the former had mingled with it too many superfluous and hurtful precepts; while the latter was so "restricted to the consideration of symbols" that it could not "exercise the understanding without greatly fatiguing the imagination." Dissatisfied with all he found, Descartes at length formed his famous Four Rules, through which he established Reason as a guide.

When the philosopher has reached this stage of thought the elimination of classical authority is complete. The whole ancient structure is swept away, and the new building begins. Parts three and four of *The Discourse* show us the foundation of intuitive knowledge placed by Descartes where the Old had been. In this construction, the transference of God from the realm of Faith to the realm of Reason, was an epoch-making step. But since not intimately connected with the question of the classical writers, it must be eliminated here. In the ensuing section, Descartes advances to Physics; and in place of the time-honoured universe of classical philosophy, he

creates a mechanical solar system and a mechanical man. Although this theory ultimately passed or was revised, and although Descartes cautiously presented it as a hypothesis, nevertheless its influence was far-reaching. For by the fascination it exerted upon the imagination, more than any contemporary speculation, it loosened the bond of ancient ideas and prepared the way for the acceptance of the Copernican view.⁸⁴

Continuing his physical research, Descartes entered the field of Physiology and Medicine. By a careful exposition, he set aside Aristotle's conception of arterial functioning, and substituted Harvey's circulation of the blood.⁸⁵ While here as in the Vortex Theory, erroneous conclusion often mingles with correct observation, the significance was none the less great. For in the early seventeenth century it was the destruction of outgrown thought that was needed; and as an iconoclast, Descartes served.

As one concludes the survey of *The Discourse on Method*, one feels that the turning point has indeed come. Whatever later works may contain, they can be only elaborations of these fundamental repudiations. By his "Method" he has swept away Aristotelian Logic; by his vortex theory, he has eliminated Aristotle's conception of the earth and "starry spheres."⁸⁶ By his mechanical body and rational soul, he has negated the Greek idea of vegetative and animal souls. By his advocacy of Harvey he has advanced a new physiology; while

his view of geometry outdistanced all that classical writers had conceived. Through these various assertions, Ancient Authority along all lines, both in subject matter and terms, is swept from position, and in its place stands the slender shaft of Pure Reason alone.

Moreover, with this fundamental break go certain changed attitudes of mind which mark the entrance into a new era. Descartes' tone toward Greek and Latin is bolder and more outspoken than that of writers hitherto. We noted at the beginning his use of French, and his conviction that native ability rather than a mastery of the "art of ancient languages" creates "Poesy" and "Eloquence." We find farther on an open avowal that the classical tongues are unessential to culture.

I am ready to grant that the life of a man would not suffice to acquire a knowledge of all that the world contains; but I am also persuaded that it would be folly to desire that it should be so; and that it is no longer the duty of an ordinary well-disposed man to know Greek and Latin any more than it is to know the languages of Switzerland and Brittany; or that the History of the Empire should be known any more than that of the smallest states of Europe. And I consider that such a one should consecrate his leisure to good and useful things alone, and occupy his memory only with those that are most necessary.⁸⁷

Again in a letter to his early instructor, Father Dinet,⁸⁸ Descartes in criticism of Bourdin, speaks with unusual asperity of that priest's "desiring to

place in the category of knowledge an acquaintance with the Latin tongue such as the riff-raff of Rome had in olden days."

And whether or not the story is true told of him and Queen Christina of Sweden, that when he saw her studying Greek, pointing to a skeleton he exclaimed, "There is my book!"⁸⁹ the anecdote is in character. For Descartes was among the earliest to proclaim that intellectual salvation lay not in a study of dead languages, but in the application of intelligence to life.

Again it is significant to the history of thought that in his search for accuracy he threw into clear emphasis the distinction between knowledge attained through intellect and that derived from sense, imagination, or memory. By this differentiation, he clarified the ancient vagueness and advanced one degree further the outposts of the science of thought.⁹⁰ Last of all, the application of Descartes' method to many phases of contemporary investigation marked the beginning of the end of the tyranny of University and Church over academic research. Thus the principle he inaugurated transcended his personal beliefs.

To the student of classic tradition as to the student of science, it seems surprising that a man of such bold intellect should have been so timid. As on page after page we read the author's repudiation of any intent to suggest practical changes, he shrinks in our imagination; and when at length we arrive at the hypothesis of God's creation through natural law,

his dissimulation assumes a comic cast. Yet as we continue to the end, and gather in the philosopher's yearning for peace, we can believe in his sincerity. Moreover, those living in our own tragic times may well appreciate his conflict; and can understand how affection for an older and more conservative generation stayed on his lips avowals which would have seemed disloyal.⁹¹ And others who themselves entering the valley of persecution, have felt their brains fag and nerves fail, may well comprehend the scholar's prayer for quiet in which to do his work.

The clear call of high endeavor on the lips of Bacon does not sound from Descartes. The dry colorless light of intellect lies upon his page. The only emotion which reaches us is fear of discomfort through the advancement of views which his masterful mind did not fail to perceive were sure to arouse hostility. Our hearts do not warm at the thought of his genius, nor vibrate to his aspiration as with Bacon. Nor does the goal of his labor seem so humanly social. Yet his motive no doubt was as exalted; and his influence upon the disintegration of classical authority was epochal.

When in 1651 Thomas Hobbes of Malmesbury published his *Leviathan*, Bacon's *Advancement of Learning* was already nearly half a century old. Great changes had taken place in the Intellectual World of Europe since those terrible days of 1588 when, as all England shrank before the Spanish

Armada, a trembling mother awaited the birth of her son. In 1588 the old regime of the Universities persisted intact; Copernicus' solar theory was undemonstrated; the laws of motion had not been discovered, nor the circulation of the blood made known. The ancient philosophy was still the best there was. By 1651 a new intellectual world had been born. Galileo, Bacon, Kepler, Harvey, Descartes,—each had performed his task. Ancient philosophy had been pronounced erroneous. Aristotle's scientific assumptions had been proved fallacious, and his Anatomy out of keeping with demonstrated facts. Ptolemy's System of the heavens, by the help of the telescope lay revealed as a huge mirage. The University of Oxford had initiated epoch-making changes in her time honoured routine,⁹² while already the Royal Scientific Society had begun to develop. On the continent new and tentative philosophies were forming in the wake of Descartes.⁹³

Sustained by these facts one might be led to infer that by 1650 classical dominance over Europe was destroyed. One might fancy fragments of its demolition scattered all the way from Giordano Bruno to Hobbes. But despite surface indications such an inference is premature. For although cultivated men of the world from Montaigne onward had turned from formal Latinity and "Aristotelity" to the heart of classical literature; and although scientists had openly discarded ancient law, yet it must

be borne in mind that these men were pariahs in the conventional world of thought. Through fear, Descartes left several works unpublished until his death; of all the scientists only Harvey received just recognition during his lifetime; while at the very close of the century, a Bentley was ostracised. Thus it is that as the student penetrates below the surface, he finds old thought paramount. To it clung University and Church — a striking example of the persistence of habit in history.

As investigation forces one to conclude that even in the mid-seventeenth century, old time reverence for the classics prevailed, one notes also that bold as had been the inroads of the scientists, classical influence in religion and government remained unattacked. It was therefore inevitable that sooner or later events should produce a critic to scrutinize their worth in these realms. The Puritan Rebellion in England, reacting upon the shrewd, penetrating mind of Thomas Hobbes, became the occasion of this inspection. Nowhere as in a study of ideas is there so vividly borne home to one a sense of immortality. As one reads Hobbes' sinewy sentences they seem alive. As in the case of every thinker his approach to the whole question of classical literature was determined by his own "Idol of the Cave." His shrewd commonsense, his keen mind and sturdy courage, faced life as he saw it, and sought solution through those material remedies which to him were the only existent ones. Since his aim was to create

a political science, whatever of the Past bore upon the subject was swept within the range of examination. Because he was a materialist, it was in philosophy applied to government that he saw a hope. Likewise since religion was so vital an influence in the stability of governments, it too was drawn within his field of survey. As one might expect, it is upon these topics that his criticism of classical literature is most original. That toward this literature itself he was not hostile, his translation of Homer attests; and although the essence of poetry — which is Beauty — escaped him, like Pope, to Homeric versification he gave his heart. More akin to his mind, however, was the terse, restrained spirit of Thucydides; and in the style of this great historian he found inspiration. Plato, too, he admired; although why it would be difficult to say; since the other-worldliness of that author seems farthest from his own ideal.⁹⁴ These personal tastes of Hobbes, however, are not significant in his most important work. Aspiring to create a political science, he scanned his classic forerunners to estimate their contribution to this subject. He measured their accomplishment as less than nothing.

There walked in old Greece a certain phantasy, for superficial gravity, though full within of fraud and filth, a little like philosophy; which unwary men, thinking to be it, adhered to the professors of it, some to one, some to another, though they disagreed among themselves, and with great salary put their children to them to be taught instead of wis-

dom, nothing but dispute, and neglecting the laws, to determine every question according to their own fancy.⁹⁵

Upon the ancient achievement in Science, he comments:

I know that the hypothesis of the earth's diurnal motion was the invention of the ancients; but that both it and astronomy, that is celestial physics,—were by succeeding philosophers strangled with snares of words. . . . And therefore the beginning of astronomy except observation, I think is not to be derived from farther time than from Nicolaus Copernicus; who in the age next preceding the present revived the opinion of Pythagorus, Aristarchus and Philolaus. After him, the doctrine of the motion of the earth being now received . . . Galileus in our time . . . was the first that opened to us the gate of natural philosophy universal, which is the knowledge of the nature of motion. So that neither can the age of natural philosophy be reckoned higher than to him. Lastly, the science of man's body, the most profitable part of natural science, was first discovered . . . by our countryman Dr. Harvey . . . in his book of the *Motion of the Blood and the Generation of Living Creatures*, who is the only man I know that conquering envy, hath established a new doctrine in his lifetime.⁹⁶

Hobbes did not regard the Greeks as the creators of a genuine political philosophy, and it was this science which he himself aspired to generate. "Natural Philosophy is therefore but young; but Civil Philosophy yet much younger, as being no older . . . than my own book, *De Cive*."⁹⁷

As Hobbes proceeds to his task of generation,

both in *The Leviathan* and in other works, he scathingly arraigns the influence of the Greeks and Romans upon modern ideas of Government. Since his ideal was one of absolute sovereignty, he condemns ancient theories of liberty. Particularly does Aristotle receive censure. "Fools value their words by the authority of an Aristotle."⁹⁸ The foundation of his political theory, that some men are born to command, others to serve, is against both reason and experience, and hath weakened the whole frame of politics.⁹⁹ His doctrine that only in Democracy is there Liberty, is pernicious. "As if no men were free out of this state."¹ He seldom speaks of kings, but as wolves and ravenous beasts;² and from his civil philosophy the Schools have learned to call all commonwealths tyranny; while his doctrines that tyrannicide is worthy of the greatest praise, and that the sovereign is bound by Civil Law, both foster sedition.³ His ideas are derived not from Nature but from his own particular State.⁴ In short, nothing can be more repugnant to government than much of Aristotle's *Politics*.⁵ Yet his opinions at this day, and in these parts, are of greater authority than other human writings;⁶ and "Men in the Western parts of the World" have received their opinions concerning the rights of commonwealths from him.⁷ His doctrine taught in the Universities, has become the origin of seditious opinions among young men. . . . "For the doctrines of Aristotle have delivered nothing concerning morality and policy

demonstratively . . . but have insinuated their opinions by eloquent sophistry." ⁸

Such a situation outrages intelligence. Young men could as well be taught the contrary; and "It is absurd that men make no pretense to more knowledge now than was delivered two thousand years ago by Aristotle." ⁹ Moreover, similar "seditious doctrines" were held by Plato, Cicero, Seneca, Plutarch and the rest of those maintainers of "The Greek and Roman Anarchies." ¹⁰ "In short, nothing was ever so dearly bought as the Learning of the Greek and Latin tongue by these Western parts." ¹¹

Not only has the influence of ancient politics been pernicious, but "The reading of the books of policies and history of the Greeks is one of the most frequent causes of rebellion against monarchy." In the same works, the killing of kings is made laudable, and the opinion promoted that subjects in a popular commonwealth enjoy liberty, but in a monarchy are all slaves. The use of such writings ought not to be permitted unless the "venime" is removed by discreet masters. ¹² The remedy for these conditions would be a sweeping reform in the subject matter and the method of teaching in the Universities. Mathematics and the Sciences should be introduced and Aristotelian Logic banished. ¹³ Moreover, in the creation of a better philosophy, there should first be established a new and accurate set of definitions to supplant the ancient.

For seeing the Universities are the Fountain of Civil and Morall Doctrine, from whence the Preachers, and the Gentry, drawing such water as they find, use to sprinkle the same (both from the pulpit and their Conversation) upon the People, there ought certainly to be great care taken, to have it pure, both from the Venime of Heathen Politicians, and from the Incantation of Deceiving Spirits.¹⁴

As to the genuine merit of Greek government, their commonwealths were no greater than those of Lucca or Venice. They had never peace nor leisure for philosophy.¹⁵ Moreover they built the doctrine of civil society upon the fact that "Man is a creature born fit for society"; whereas this axiom is false.¹⁶ For "the beginning of mutual society is fear and a desire to profit thereby." The merit of Roman government has also been much exaggerated. Despite boasted greatness the Roman People was "a beast of prey."

Whilst with its conquering eagles it erected its proud trophies so far and wide over the world, bringing the Africans, the Asiatics, the Macedonians, and the Achaeans with many other despoiled nations into a spacious bondage, with the pretense of preferring them to be denizens of Rome! ¹⁷

To Antiquity, itself, therefore, nothing is due; and the praise of ancient authors proceedeth not from reverence for the dead but from the competition and mutual envy of the living.

Since in Hobbes' mind stability of Government was intimately allied with religion, he turned his

investigation to the history of classical influence upon Christianity:

The first doctors of the Church, next the Apostles, born in those times, whilst they endeavored to defend the Christian faith against the Gentiles by natural reason, began also to make use of philosophy, and with the decrees of Holy Scripture to mingle the sentences of heathen philosophers; and first some harmless ones of Plato, but afterwards, also many foolish and false ones out of the physics and metaphysics of Aristotle; and bringing in the enemies, betrayed unto them the citadel of Christianity. From that time, instead of the worship of God, there entered a thing called *school divinity*, walking on one foot firmly, which is the Holy Scripture, but halted on the other rotten foot, which the Apostle Paul called *vain*, and might have called *pernicious philosophy*. . . . It is like that *Empusa* in the Athenian comic poet, which was taken in Athens for a ghost that changed shapes, having one brazen leg, but the other was the leg of an ass, and was sent, as was believed by Hecate, as a sign of some approaching evil fortune.¹⁸

In the Middle Ages, Aristotle's philosophy was called in to the assistance of the popes. It was taught in the Universities by the Schoolmen who wrote "Books of School divinity which no man else, nor they themselves, were able to understand."¹⁹ By this method these divines maintained the papal authority over both kings and their subjects. In the past century Elizabeth freed the English Church from the popes, and in our own genera-

tion the Civil Wars have released it from episcopacy.²⁰

Nevertheless, we are still in the Night.

Whence comes it that in Christendom there has been almost from the time of the Apostles such jostling of one another out of their places both by forraign and Civil War, such stumbling after every little Asperity of their own fortune and every little eminence of that of other men? — And such diversity of ways in running to the same Mark, Felicity, if it be not Night amongst us — or at least a Mist?

The causes of this failure of the Church lie at the door of Pagan influence. Daemonology — originating in Greek ignorance of Optics and extending back to the Poetry of Hesiod — handed on to Christianity a belief in good and evil spirits.²¹ Through this, entered purgatory,²² incantations, “Dead men’s ghosts, fairies, and other matter of Old Wives’ Tales.”²³ The worship of images owes its origin to the desire of converted pagans to retain lovely heathen statues in their homes; the canonizing of saints dates back to Romulus; and the pope is direct heir of the *Pontifex Maximus*.²⁴ The bearing of images in processions, holy water, holy-days, torches and lighted candles before the shrines, all come through the Pagans. The Romans had their Bacchanalia; the Church has its Wakes; the Heathens the procession of Priapus, the Christians their dancing about may-poles.

And if a man would well observe that which is delivered in Histories concerning the religious rites of the Greeks and Romans, I doubt not but he might find many more of their old empty bottles of Gentilisme which the Doctors of the Roman Church either by negligence or ambition have filled up again with the new wine of Christianity that will not fail in time to break them.²⁵

This Darkness is increased by the influence of the "vain and fabulouse Philosophie" of the Greeks. Their Schools were of no profit:

After the Athenians by the overthrow of the Persian armies had gotten the dominion of the Sea; . . . and were grown wealthy; they that had no employment, neither at home, nor abroad, had little else to employ themselves in, but either . . . in *telling or hearing news*, or in discoursing of Philosophy, publicly to the youth of the city. Every Master took some place for this purpose.²⁶

Their meeting places were called *Scholae*, signifying "Leasure," and "their disputations, *Diatribes*, that is to say, *a Passing of the Time*." And there they, with the young men, met often "to prate and loyter."²⁷

"But what has been the utility of these Schools? What science is there at this day acquired by their readings and disputings?" They had little Geometry; their Natural Philosophy was a "dream." Their Ethics consisted in a description of their own passions; their Logic was merely "Captions of Words." The mingling of their Metaphysiques

with Scripture has led to the absurdity of "Abstract Essences," which doctrine seduces men from "The Sovraign Power of the Country" to submission to a priest.²⁸ To conclude, "There is nothing so absurd that the old Philosophers have not some of them sustained." Yet this philosophy is now taught in the Universities as the "Hand-maid of the Roman Religion"; and a misunderstanding of Aristotle's terminology has closed to reconstruction the Science of Definition as a "supernatural" subject!²⁹

As Divinity teaching is dominated by classical influence, so are the writings upon it:

The writings of the School Divines are nothing else for the most part but insignificant trains of strange and barbarous words, or words otherwise used than in common use of the Latin tongue; such as would pose Cicero and Varro, and all the Grammarians of Ancient Rome. . . . Which if any man would see proved let him see whether he can translate any Schoole Divine into any of the Modern Tongues, as French, English, or any other copious language; for that which cannot in most of these be made intelligible, is not intelligible in the Latine.³⁰ . . . Which insignificance of Language . . . hath a quality not only to hide the Truth, but also to make Men think they have it, and desist from further search.

This obscure language and the barbarous terms are a relic of the past:

The Papacy is no other than the Ghost of the deceased Roman Empire sitting crowned upon the grave thereof. . . . The language also which they use both in the Churches and

in Publique Acts being Latine, which is not commonly used by any nation now in the World, what is it but the Ghost of the Old Roman Language? ³¹

Since Greek and Latin are so intimately bound up with the Roman Religion, they too should go:

As for the Latin, Greek and Hebrew tongues, it was once, to the detection of the Roman fraud, and the ejection of the Romish power very profitable, or rather, necessary; but now that is done, and we have the Scripture in English, I can see no great need of Latin, Greek, and Hebrew. I should think myself better qualified by understanding well the languages of our neighbours, French, Dutch, Italian.³²

Gondibert ³³ to Hobbes is as beautiful as Homer:

And but for the clamour of the multitude that hide their envy of the present under a reverence for Antiquity, I should say further that it would last as long as either the Aeneid or Iliad, but for one disadvantage; and the disadvantage is this: the languages of the Greeks and Romans . . . have put off flesh and blood and are become immutable, which none of the modern tongues are like to be.³⁴

Nor does Hobbes approve of the use of Greek or Latin quotations to adorn his text:

There is nothing I distrust more than my Elocution, which nevertheless I am confident . . . is not obscure. That I have neglected the ornament of quoting Ancient Poets, Orators, and Philosophers, contrary to the custome of late time, proceedeth from my judgment grounded on many reasons. For first of all, Truth of Doctrine dependeth either

upon Reason or Scripture; both which give credit to many, but never receive it from any writer. Secondly, the matters in question are not of Fact, but of Right, wherein there is no place for witnesses. There is scarce any of those old writers that contradicteth not sometimes both himself and others; . . . Fourthly, such opinions as are taken onely upon credit of Antiquity, are not intrinsically the judgment of those that cite them, but words that pass (like gaping) from mouth to mouth. Fifthly, it is many times with a fraudulent design that men stick their corrupt doctrine with the cloves of other men's wits. Sixthly, I find not that the Ancients they cite took it for an Ornament to doe the like with those that went before them. Seventhly, it is an argument of Indigestion; when Greek and Latin Sentences unchewed come up again, as they used to do, unchanged. Lastly, though I reverence those men of Ancient time, that either have written Truth perspicuously or set us in a better way to find it out ourselves; yet to the Antiquity itself I think nothing is due; for if we will reverence the Age, the Present is the Oldest. . . . But if it be well considered, the praise of Ancient Authors proceeds not from the reverence of the Dead, but from the competition and mutual envy of the Living.³⁵

The Seventeenth Century was passing into all but its final decade when Hobbes at ninety-one ordered "a warm great coat which must last him three years, and then he would have such another." A little later he laid aside his pen. Forty years had elapsed since *Leviathan* first stirred the minds of Europe. During that period the victory of the scientists had been won; the Universities, inaugurating new

courses, were at last becoming emancipated from scholasticism. A modern terminology in philosophy had become assured; and already thought was tending toward that Deistic movement which the Eighteenth Century ushered in. Thus one might say that by the close of the seventeenth century classical dominance in the old sense was gone. No longer did the word of Aristotle silence disputation, or a quotation from Plato put a quietus upon thought. Yet one phase of classical literature remained intact; one group of writers still bore the charmed insignia of perfection. Poesy and Oratory still reigned; with the words of Homer and Cicero men could conjure as of old. The last great struggle with those ancient gods in shining armor was to continue on for fifty years, centering round the names of Temple and Fontenelle. Upon the position of the classics as literature Hobbes' influence was slight; yet his spirit of incisive criticism, and his approach to a subject however sacred, through reality and not illusion, became the index of a future mood. And it was in this same intellectual temper that at the opening of the eighteenth century Bentley and Fontenelle, inspired by different motives and attaining widely divergent results, approached the last high redoubts of Poesy and Oratory and subjected them to the test.

III

THE LITERARY PHASE

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VIEWED in the perspective of the history of thought, the quarrel between the Ancients and Moderns was a conflict resulting from the attempt of the New Philosophy to extend to the criticism of classical literature those scientific methods so successfully applied in other fields of investigation. Beginning in England with the more general discussion of Glanvil and Stubb, it culminated in the famous Battle of the Books between Bentley and Boyle. In France taking the form of a revolt against the canons of taste established by the French Academy, the contest raged around Perrault and Fontenelle. Its history is the last exciting chapter in the development of a critical attitude toward classical authors before that interest merges into the issues of a wholly modern age.

The reader of the twentieth century is freed from certain intellectual problems which confronted the man of the eighteenth. Living now in an era where neither faith in classicism nor even in material law prevails, no possession of the Past or Present however precious, holds him wholly, and his hope lies

in the Beyond. Hence it is that without sense of inharmony or of invidious comparison, he gathers into one treasure house of thought the productions of every age and country. And in taking inventory of his wealth, he places side by side the dawn words of Homer with their "Light that never was on sea or land," the poignant spiritual aspiration of Dante's noonday struggle, and the twilight restraint of loveliness in *Dover Beach*. All are to him expressions of that form of Beauty called great Literature, which consisting of high thought conveyed through peerless words, lies outside the limits of time and place, and exists with the verities, like a star.

That the reader of the late seventeenth century felt otherwise is not surprising. Born at a period when literary classicism had been his fathers' faith, and preference for the vernacular a kind of heresy; living in an era of political and religious transition, he faced a conflict between traditional ideas and a newly acquired intelligence. As science ruthlessly destroyed one tenet after another of earlier beliefs about the material world, and free thinkers attacked the fabric of religion, it is not astonishing that the lover of settled society turned back to Poesy and Oratory as to a refuge immune from the ravages of time.

At the same moment less conservative thinkers moved by different motives went searching back to Hellenism. In addition to aesthetic pleasure and light upon the problems of life, they sought liberty

of ideas. With unprecedented eagerness, interest in Greek literature revived. In England the movement was informal and extended out beyond the borders of the universities. Although stimulating, it lacked almost wholly the spirit of scientific criticism. But the extension of this new spirit to Poesy and Oratory was inevitable, and a struggle seems foreordained. Therefore the quarrel between the Ancients and Moderns became a conflict between scholars who insisted upon submitting classical writings to the test of scientific criticism, and conservative thinkers who clung to the old unquestioning faith in their traditional value.

In France the movement, although fundamentally the same, had a different surface aspect. The artificial period of Louis XIV was at its zenith. Classical standards were absolute, and men thought and wrote according to established rule. Thus the revolt of the coterie about Fontenelle seems a natural reaction against the tyranny of form. But at the heart of things, here too lay rebellion against ancient law, and an adventure of spirit into liberty.

The war between lovers of the Classics and devotees of the New Philosophy took the form of a conflict of words. As the smoke of battle clears, and multitudinous details are swept aside, there emerge into clear perspective five vivid personalities each expressive of a different intellectual temper in relation to the famous controversy. Temple, Wotton, Bentley, Swift, and Fontenelle are these com-

batants. To interpret through his writings the spirit of each will be the effort of this study.

In *Reflections upon Ancient and Modern Learning*, by William Wotton, we find the origin of our story. To have missed reading this author is to have failed in a liberal education. It is a pleasure to have known the upright gentleman; while only he of all the universe has been able to render fascinating the barometer and pendulum block. Wotton may be said to have been an old-fashioned controversialist of the finest type. Pugnaciously, yet with a certain sweetness withal, he rolls up his sleeves and strides valiantly into the fray. He would have us know that the dispute is none of his making, and that he aims to be a pacificator. In order that circumstances and issues may be clearly understood, he summarizes the origin of the strife.

The present of the designs and studies of mankind is so very different from what it was one hundred and fifty years ago, that it is no wonder if men's notions concerning them vary as much as the things themselves. The great difference arises from the desire which every man has who believes that he can do greater things than his neighbors, of letting them see how much he does excel them: this will oblige him to omit no opportunity that offers itself to do it, and afterwards to express his satisfaction that he has done it. . . .

If this way of reasoning will hold it may be asked how it comes to pass that the learned men of the last age did not pretend that they outdid the Ancients, as well as some do now? They would, without question, could they have had

any colour for it: it was the work of one age to remove the rubbish, and to clear the way for the future inventors. Men seldom strive for mastery, where the superiority is not in some sort disputable; . . . accordingly, as soon as there was a fair pretense for such a dispute, there were not wanting those who soon made the most of it, both by exalting their own performances, and disparaging everything that had been done of that kind by their predecessors. Till the new Philosophy had gotten ground in the world, this was done very sparingly; which is but within the compass of forty or fifty years. There were but few before who would have been thought to have exceeded the Ancients, unless it were some few physicians who set up chymical methods . . . in opposition to the Galenical. . . .

Soon after the Restoration of King Charles II, upon the institution of the Royal Society, the comparative excellency of the old and new philosophy, was eagerly debated in England. But the disputes then managed between Stubbs and Glanville were rather personal relating to the Royal Society, than general, relating to knowledge in its utmost extent. In France this controversy has been taken up more at large: The French were not satisfied to argue the point in Philosophy and Mathematics, but even in Poetry and Oratory too; where the Ancients had the general prejudice of the learned on their side. Monsieur Fontenelle, the celebrated author of a book concerning *The Plurality of Worlds*, begun the dispute about six years ago, in a little discourse annexed to his *Pastorals*.¹ He is something shy in declaring his mind; at least in arraigning the Ancients, whose reputations were already established; though it is plain he would be understood to give the Moderns the preference in Poetry and Oratory, as well as in Philosophy and Mathematics. His book being

received with great applause it was opposed in England by Sir William Temple, who in the Second Part of his *Miscellanea*, has printed an essay upon this very subject. Had Monsieur de Fontenelle's Discourse passed unquestioned, it would have been very strange, since there was never a new notion started in the world, but some were found who did as eagerly contradict it.²

Two Essays of Temple's *Miscellanea* are devoted to a refutation of Fontenelle's ideas.³ In the first he tells us that "Whoever converses much among the Old Books will be something hard to please among the New." Yet these also have their value; and two works by modern authors recently read charmed him.⁴ In the end, however, they became a disappointment. For the first closed with a "Panegyric of Modern Learning"; while the author of the second in a later work fell "grossly into the censure of Old Poetry and preference of the New." These "strains" moved Temple to indignation, and he therefore decided to look into the question of how far either Reason or Experience might determine in their favour. "The force of all that I have met with upon this subject," he concludes, "is, first as to knowledge, that we must have more than the Ancients, because we have the advantage both of theirs and our own. . . . Next, as to wit or genius, that nature being still the same these must be much at a rate in all ages."⁵

Temple's refutation of this view is epitomized by Wotton:

The general proposition which Sir William Temple endeavours to prove. . . . is this, That if we reflect upon the advantages which the ancient Greeks and Romans had to improve themselves in Arts and Sciences, above what the Moderns can pretend to; and upon that natural force of genius so discernible in the earliest writers whose books are still extant, which have not been equaled by any person that have set up for promoters of knowledge in the latter ages, and compare the actual performances of them, . . . we ought in justice to conclude that the learning of the present age is only a faint and imperfect copy from the knowledge of former time, such as could be taken from the scattered fragments, which were saved out of the general shipwreck.⁶

To substantiate his statement Temple points out that printing has increased copies rather than the quality or number of great books; that the earliest philosophers were the best; and despite the claims of Descartes and Hobbes no modern ones have excelled Plato and Aristotle. Ancient prowess in Grammar and Rhetoric is beyond dispute; while the title of classical poetry to supremacy is denied only by Fontenelle, whose *Poésies Pastorales* is his most convincing refutation.⁷ Science has produced nothing to vie with the ancients, unless it be Copernicus' Theory, or Harvey's circulation of the blood. But since these hypotheses have not changed the conclusions of Astronomy or Medicine, they are of little use. Moreover, the earlier age was superior in music, rhyming, magic and architecture. In fact, the only great discovery of modern times is the

loadstone, whence has come navigation and geographical knowledge. But even here we have fallen short. Exploration has become tainted with commerce, and has lost sight of the improvement of man. "Many great and more noble uses would have been made of such conquests" had they fallen to the Greeks and Romans.⁸ Moreover, the New Learning is not advancing; our "First flights were our best." "The modern scholars because they have for a hundred years past learned their lessons pretty well, are much more knowing than the Ancients, their masters."

But let it be so, and proved by good reasons, is it so by Experience too? Have the studies, the writings, the productions of Gresham College, or the late Academie of Paris, outshined . . . the Lyceum of Plato, the Academy of Aristotle, the Stoa of Zeno, the Garden of Epicurus? Has Harvey outdone Hippocrates, or Wilkins, Archimedes? Are Davila's and Strada's Histories beyond those of Herodotus and Livy? Are Sleyden's Commentaries beyond those of Cæsar? The flights of Boileau above those of Virgil? If all these must be allowed, I will then yield Gondibert to have excelled Homer . . . and modern French poetry all that of the Ancients.⁹

The claim that modern literature is equal to ancient is absurd. But even were it true, the modern compositions could not last. The vernacular languages are hybrid and passing, whereas Latin is the Noble Language of the noblest nation that ever lived. "The oldest books are still in their kind

the best." Aesop's *Fables* and *The Letters of Phalaris* have no peers; while among modern authors only a few are worthy even of comparison with the classical. Boccaccio, Polo, Rabelais, Montaigne, Cervantes, and Sydney rank first. But modern French has been so refined as to lose force and become inferior to that of an earlier age.

So with a sigh for "Old Wine to drink and Old Books to read," Temple closes his reflections.

The fourth essay of the *Miscellanea*, *Part II*, gives exact expression to the pre-modern opinion of classical poetry:

I think no man has been so bold among those that remain to question the title of Homer and Virgil not only to the first rank, but to the supreme dominion in this State, and from whom as the great law givers as well as princes, all the laws and orders of it are or may be derived. Homer was without dispute the most universal Genius that has been known in the world, and Virgil the most accomplished. . . . Upon the whole, I think that Homer was . . . the vastest, sublimest, and the most wonderful Genius; and that he has been generally so esteemed, there cannot be a greater testimony given than what has been by some observed, that not only the Great Masters have found in his works the truest principles of all their Sciences, or Arts, but that the noblest nations have derived from them the original of their several races. . . . In short those two immortal Poets must be allowed to have so much excelled in their kinds as to have exceeded all comparisons, to have even extinguished emulation, and in a manner confined true Poetry not only to their two languages, but to their very persons.¹⁰

As to recent laws of verse:

The modern French wits (or Pretenders) have been very severe in their censures and exact in their rules, I think to very little purpose; for I know not why they might not have contented themselves with those given by Aristotle and Horace, and have translated them rather than have commented upon them, for all they have done has been no more . . . rather to have valued themselves than improved any body else.¹¹

The above quotations exactly express the view of the old-school man who held classical poetry as a kind of religion, and who regarded it with the same veneration that the mediaeval man did the Bible. Its content was beyond criticism and must not be impugned. To approach it lightly was sacrilege. In its mysterious depths one found the fountain of "races" and "the sciences" of all succeeding ages. This two-fold attitude — worship and credulity, and the sweeping of opinion into large waves of emotion without accuracy of thought — completely represents the temper of the intellectual era that was passing. Temple gracefully sings its swan song.

Two interesting results came from the above essays: they were the innocent excitant of a storm of controversial pamphlets which flooded England for twenty years; and they became the occasion of a new edition of *Phalaris* which originated the quarrel between Bentley and Boyle.¹²

Of polemical writings, Wotton's *Essay* earlier referred to is the most noteworthy; since it is a com-

plete embodiment of the attitude and method of the New Philosophy in contrast with the old. As Temple voiced love of the Past, Wotton expresses hope in the Future. Where Temple argued through vague sentiment, Wotton speaks in the specific and concrete. He tells us plainly that in any convincing proof of such a question, one must offer facts. Using the historical and scientific method, he sets out to examine the products of classical civilization as compared with our own. In twenty-nine long chapters he enters into exhaustive investigation of ancient and modern achievement. At each step, he offers proof and cites authority. He does not aim to argue syllogistically; he aims to produce facts.¹³ Strange to say, the work never fails to interest the reader; for it is charged with a vivid personality and replete with stimulating ideas. Likewise, however foolish such an investigation may appear at the present day, the erudition and method of the author command our respect, and the book remains an interesting evidence that the era of science in literary disputation had been ushered in.

Wotton's conclusion is that in Politics, Ethics, Poetry and Oratory, the ancients may claim superiority. This does not extend to History, however, in which Comines and Father Paul equal any writer of the past. On the other hand Perrault's assertion that modern French poets and orators excel the ancients is absurd.¹⁴ His foundation argument that Cicero excelled Demosthenes because he lived two

hundred years later, and that by sequence of reasoning the French Academy outdoes them both, is a fallacy; for it fails to allow for that decay of Eloquence which "after ages" often suffer. His contention that the ancients were unskilled in depicting Love is equally groundless.¹⁵

"Ovid and Tibullus knew what Love was in its tenderest motions; they described its anxieties and disappointments in a manner that raises too many passions even in unconcerned hearts." . . . As to French love-writers, "One can as soon believe Varillas and Maimbourg wrote the Histories of Great Actions just as they were done, as that men ever made love in such a way as these Love-and-Honour Men describe."¹⁶ Perrault seems to have had his head possessed of the French Romances which "to be sure, must never fail to end in a general wedding!" Moreover, the French habit of translating classical literature into the vernacular and then comparing it with native verse is misleading. The French language "wants strength for the nobler parts of Poesy." So that,

Tho Sense is Sense in every Tongue, yet all languages have a peculiar way of expressing the same things, which is lost in translation. . . . Besides, the beauty of an author's composition is in all translations entirely lost. . . . So that a man can have but half an idea of ancient eloquence and that not always faithful, who judges it without such skill in Greek and Latin as can enable him to read Histories, Orations, and Poems in those languages.¹⁷

On the other hand, Temple's assertion that "No man ever disputed Grammar with the Ancients" is unfounded. In nicety of words, the French Academy equals Isocrates, while no ancient work upon Grammar compares with Locke's Chapter in *The Human Understanding*.¹⁸ Likewise the Moderns excel in Architecture, Painting and Sculpture. They are outdone only by "the naked bodies of the Ancients," which "show something extremely noble which one wants words for." It is possible, however, that "If some of the most excellent of the modern pieces should be preserved 1500 or 2000 years, or tinged with some chymical water that could in a short time make them appear antique," they might be viewed with the same veneration as the old.¹⁹

Having settled the claims of the Ancients in Poesy, Oratory, and the Fine Arts, Wotton turns next to "The Mathematical and Physical Sciences in their largest extent."²⁰ Before starting, our leader warns us that

These are things which have no dependence upon the opinions of men; they will admit of fixed and undisputed mediums of comparison and judgment; so that tho it may always be debated who have been the best orators or the best poets; yet it cannot always be a matter of controversie who have been the greatest geometers, arithmeticians, astronomers, musicians, anatomists, chymists, botanists, or the like; because a fair comparison between the inventions, observations, experiments, and collections of the contending parties must certainly put an end to the dispute.²¹

Going back to Sir William Temple's statement that "There were vast Lakes of Learning in Egypt, Chaldea, India, and China, where it stagnated for many ages, till the Greeks brought buckets and drew it out," Wotton proceeds to examine the whole field of ancient achievement: "The question which is first to be asked here is, *Where are the Books and Monuments wherein these Treasures were deposited for so many Ages?*" We are to judge Natural History from Pliny; Medicine from Galen; Astronomy from Ptolemy; Mathematics from Pappus' Collections; Philosophy from the Treatises. In twenty chapters the interest of which never flags, Wotton then demonstrates that the moderns are incomparably superior. He declares that even if all Temple said were true that is no reason why the ancients should not have outstripped their teachers, and we have surpassed them both. He emphasizes that matters in which the ancients only divined the truth have been proved by modern scientists. Moreover,

We cannot judge of the characters of things and persons at a great distance when given second hand, unless we know how capable those persons from whom such characters were first taken were to pass a right judgment upon such subjects.²² . . . Excessive commendations of any art or science whatsoever, as also of the learning of any particular men or nation, only proves that the persons who give such characters, never heard of any thing or person that was more excellent in that way; and therefore that admiration may be as well

supposed to proceed from their own ignorance as from the real excellency of the persons or things.²³

If now we examine into the actual achievement of the Ancient Wonders, it appears far inferior to the claim. All that we learn of Pythagoras from his most ancient biographer²⁴ is, that very little about him is known. He seems to have been a law-giver rather than a promoter of learning; for the only record of a real intellectual feat by him is his invention of the 47th Proposition by Euclid. He increased his reputation by veiling his personality and making a mystery of himself. But if we compare his explication of generation with Harvey's we shall see the absurdity of his reasoning. Equally ridiculous are the stories of magic wrought by Empedocles, and of Democritus' ability to tell virgins at sight. "These are instances very seriously recorded by grave authors of the Magical Wisdom . . . as Sir William Temple defines it."²⁵

If next we turn to Logic and Metaphysics, we find the Discourses of Descartes, Locke, and Tschirnhaus beyond anything the Greeks have written. To Bacon and Descartes belong credit for demonstrating that the Common Logic of the Schools is insufficient:

Lord Bacon and Descartes were the two great men who both found fault with the Logic of the Schools as insufficient of itself for the great design of Logic, which is the Advancement of Real Learning; and got authority enough to persuade the world in a very great degree that other methods must be taken besides making syllogisms . . . by those who

would go much farther than their predecessors went before them. The true use of the Common Logic being rather to explain what we know already and to detect the fallacies of our adversaries, than to find that out of which we are ignorant. So that the Moderns have enlarged its bottom and . . . if not made it perfect, have yet put it into such a posture as that future industry may . . . complete it.²⁶

In Metaphysics also the Cartesians discourse more intelligently than any of the Ancients. And although "Very many of their particular notions . . . are justly liable to exception, yet the main foundations upon which they reason are for the most part real; and so by consequence, the superstructures are not entirely fantastical." Likewise if we compare the writings of Descartes, Malebranche, and Locke, with Plato and his commentators, we shall find them as excellent. Again, Newton, Leibnitz, and Descartes, far excel the Ancients in Geometry, while our Arithmetic and Algebra also surpass theirs.²⁷

It is in discussing the comparative excellence of ancient and modern books of Philosophy that our author states his *Magna Charta* of the new Intellectual Regime.

As for modern methods of philosophising as compared with the ancient, I shall only observe the following particulars. (1) No arguments are received as cogent, no principals are allowed as current amongst the celebrated philosophers of the present Age, but what are in themselves intelligible; that so a man may frame an idea of them of one sort or other. Matters and motion with their several qualities are only

considered in modern solutions of physical problems. Substantial Forms, Occult Qualities, Intentional Species, Idiosyncrasies, Sympathies, and Antipathies of things, are exploded; not because they are terms used by the Ancients, but because they are only empty sounds, words whereof no man can form a certain and determinate idea. (2) Forming of sects and parties in philosophy that shall take their denominations from, and think themselves obliged to stand by the opinions of any particular philosophers is, in a manner, wholly laid aside. Descartes is not more believed upon his own word than Aristotle. Matter of Fact is the only thing appealed to; and Systems are little further regarded than as they are proper to instruct young beginners who must have a general notion of the whole work before they can sufficiently comprehend any particular part of it. . . . (4) The New Philosophers . . . avoid making general conclusions till they have collected a great number of experiments or observations upon the Thing in Hand; and as new light comes in, the old hypotheses fall without any noise or stir. So that the inferences that are made from enquiries into Natural Things . . . are . . . received with this tacit reserve, *As far as the experiments or observations already made will warrant.*²⁸

I do not say that none of these things were anciently done; but only that they were not so general. . . . The whole Ancient Philosophy looks like a thing of ostentation and pomp; . . . The old Philosophers seemed still to be afraid that the common people should despise their Arts if commonly understood.²⁹

Last of all, the Moderns are the masters of the early writers in Philological Learning and Divinity. The classical man knew his own time well; but

owing to poor communication and infrequency of literary commerce his information regarding events outside his own generation was inaccurate. Likewise owing to geographical separation, the Greek and Latin Worlds at contemporary periods were ignorant of each other. For this reason, it will not seem ridiculous to say that Joseph Scaliger, Isaac Causabon, . . . and other philologists of their stamp, may have had a much more comprehensive view of Antiquity than the Ancients themselves had. In part because of this limitation, the Ancient Divine was inferior to the modern: he was ignorant of Hebrew and the Oriental languages and custom; he reasoned badly, indulging in "Homilies," "Flights of Rhetorick," and "Allegorical Interpretations." His sermons consisted of "a loose, paraphrastical Explication of a large Portion of Scripture," which ended "at last in a general Ethical Harangue."³⁰

To the student of thought, Wotton's Essay is a most interesting work. It stands saliently as the first attempt to make a comprehensive investigation of classical literature by scientific method. Moreover, in extending his enquiry to the Church Fathers, and in attempting to gauge the accuracy of the knowledge which the Ancients had of themselves, Wotton enlarges the field of critical research. As his method is modern, so is his spirit. Dispassionate and fair minded, he realizes the value of varied contributions to culture, and credits each. While appreciating cultivated scholarship, he never confuses mastery

of meticulous details with genius. He extols those Moderns "who have dared to believe their own Reason, against the positive evidence of an old Historian."³¹ He gives voice to the opinion so many have cherished since:

To pore in old MSS.; to compare various Readings; to turn over Glossaries and old Scholia upon Ancient Historians, Orators, and Poets; to be minutely critical in all the little fashion of the Ancient Greeks and Romans, the memory whereof was in a manner lost within fifty or an hundred years after they had been in use, may be good argument of a man's industry and willingness to drudge, but seems to signifie little to denominate him a great genius or one who was able to do great things of himself.³²

In estimating the uses of knowledge Wotton shows discrimination and a sense of values. He distinguishes clearly between the ability to write beautiful Latin and the art of being a critic. Believing that learning should be made free to the common people and utilized for their advancement, he stigmatizes the mystery and seclusion in which the Ancients enveloped it. He rebukes Sir William Temple for deploring the use of navigation for commerce and the accumulation of wealth. "Knowledge not reduced to practice when that is possible, is so far imperfect, that it loses its principal use." In his Conclusion, he acknowledges the service of each great age, but looks to the future for intellectual consummation:

By joining Ancient and Modern Learning together, and by studying each as Originals in those things wherein they

severally do most excel; by that means . . . the world will soon see what remains unfinish'd, and men will furnish themselves with fitting methods to complete it; . . . So some future Age though, perhaps, not the next, and in a country now possibly little thought of, may do that which our great men would be glad to see done; that is to say, they may raise real knowledge upon the foundations laid in this our age, to the utmost possible perfection to which it can be brought by mortal men in this imperfect state.³³

The second interesting episode in the "Battle of the Books" is the Phalaris controversy between Dr. Thomas Bentley of Cambridge and Charles Boyle of Oxford. This dispute is significant in the present study because it produced the famous *Dissertation upon Phalaris* — the first literary work in which the historical and scientific method are relentlessly applied to an alleged classical document. It came about through the fact that Dean Aldrich of Christ Church, Oxford, stimulated by Temple's praise of *The Phalaris Letters*, decided to issue a new edition, copies of which were to be presented as New Year's gifts to his students. Charles Boyle, an amiable young person of seventeen, was honoured with the request to prepare it.³⁴ Desiring to consult a manuscript in the Royal Library at St. James, Boyle commissioned his London bookseller to procure and copy the same. Through negligence, the latter failed to complete the collation, but represented to Boyle that the deficiency was due to the discourtesy of Bentley, who had withdrawn the manuscript before the copy

could be finished. As a result, Boyle included in his new edition of *The Phalaris Letters* an announcement hostile to Bentley. The latter, expecting that the offensive reference would be withdrawn at once, wrote Boyle the true circumstances; but for some reason his reply was only the cold statement that it was now too late to change the publication; and that Bentley might take what reparation he saw fit. The famous Dissertation was the result.

One year earlier, William Wotton when publishing his *Reflections upon Ancient and Modern Learning*, had requested Bentley to prepare as *addenda* to it, articles upon the spurious nature of *The Phalaris Letters*, *Aesop's Fables*, and other popular classical works. Too busy at that time to execute the task, Bentley complied in the second edition, 1697. Introductory to his essay was a statement concerning the Oxford Phalaris and Boyle's conduct. The attack upon *Phalaris*, coupled with the declaration against Boyle produced a sensation in Christ Church Society, and led to the immediate preparation of a counter-charge entitled *Dr. Bentley's Dissertations on the Epistles of Phalaris, and the Fables of Aesop, Examined by the Honourable Charles Boyle, Esq.*³⁵

Although the work was a somewhat vulgar and personal attack, rather than a scholarly refutation of Bentley's view, it was received with the applause of polite society and was supposed to settle the contest. But in 1699 appeared the masterly *Dissertation*,³⁶ which stands as the foundation of modern

classical criticism, and points the way to the later work of Niebuhr and Wolf. Using the historical and scientific method, Dr. Bentley sets out to prove from internal evidence that *The Epistles of Phalaris* are a forgery.³⁷ The *Dissertation* is "a remorseless syllogism." But in addition to its main theme it is from start to finish filled with interesting side comments upon every conceivable phase of classical material. The Preface is sturdy and dignified, and is in itself sufficient refutation of the charge made by Bentley's enemies that he was "dull" and a "pedant." Moreover, he reveals intellectual perspective and a sense of values. In regard to his quarrel with Boyle he avers: "I do not love the unmanly work of making long complaints of injuries; which I think is the next fault to deserving them."³⁸ In answer to Boyle's charge that he had wasted three years in disproving "a very inconsiderable point, which a wise man would grudge the throwing away of a week's thought upon," Bentley says:

I doubt not but many others whose designs and studies are remote from this kind of learning will follow this censure. To all such men as these, I must answer, that if the dispute be quite out of their way, they have liberty to let it alone; it was not designed for them, but for others that know how to value it; who if the principal point about Phalaris were quite dropt, will think the other heads that are here occasionally handled not unworthy of a scholar. But that the single point whether Phalaris be genuine or no, is of no small importance to learning. . . . To undervalue this dispute

. . . because it does not suit to one's studies, is to quarrel with a circle because it is not square. If the question be not of vulgar use, it was writ therefore for a few; for even the greatest performances upon the most important subjects are no entertainment at all to the many of the world.³⁹

In denying the charge of having spent three years upon Phalaris, he avows: "But suppose this accusation true; I had rather have spent all that time in discerning truth than have spent three days in maintaining an error."⁴⁰

The argumentation proper opens with a brief history of literary forgery in which this pastime is shown to have been common with the sophists. The time element is then carefully investigated by a comparison of source materials, and Phalaris is proved to have lived *circa* 485 B.C.⁴¹ Reasoning on this basis, the author demonstrates that *Phalaris* in his last *Epistle to Enna* wrote of himself as borrowing money from Phnitia, three hundred years before that city was built.⁴² He shows that in *Epistle XCII*, Phalaris accuses Stesichorus of raising money and soldiers at Alaesa one hundred and forty years before it existed.⁴³ He proves that the tyrant made his Messenian physician Polyclitus a present of "ten couple of Thericlean cups" one hundred and twenty years before Thericles was born.⁴⁴ Moreover in *Epistle XCII*, Phalaris in threatening to cut down the Himereans "like a pine-tree," uses an expression first uttered by Croesus who did not reign until six years after the Sicilian tyrant's death,

He reveals the tyrant also as boasting of a victory over the Tauromenites before their city was founded; while in *Epistle LXIII*, the incorrigible old fraud rages against Aristolochus for "writing tragedies against him" years before a tragedy had ever been presented.⁴⁵

Turning next to the language element, Dr. Bentley points out the absurdity of a ruler in the heart of Sicily writing to adjoining cities in an Atticised vocabulary.⁴⁶

Triumphantly passing on to a discussion of coinage, he shows that the tyrant used Attic instead of native money, and concludes his remarkable work with a further demonstration that the subject matter of the *Epistles* is out of harmony with its environment and time:

'Twould be endless to prosecute this part, and shew all the silliness and impertinency in the matter of *The Epistles*. For take them in the whole bulk, they are a fardle of commonplaces, without any life or spirit from action and circumstance. Do but cast your eye upon Cicero's letters, or any statesman's as Phalaris was. . . . When you return to these again, you feel by the emptiness and deadness of them, that you converse with some dreaming pedant with his elbow on his desk. . . . All that takes you or effects you is a stiffness and stateliness, and operoseness of style.⁴⁷

The *Dissertation* was not an isolated phenomenon in Dr. Bentley's career, but a logical offshoot of the whole tenor of his thought. In full sympathy with the desire of his generation to reach truth of content

rather than form in classical literature, he saw that only by a comparison and emendation of early manuscripts could the real meaning of an author be ascertained. He therefore worked for restored and accurately interpreted texts as a foundation, and thus indirectly became the advancer in a movement leading away from Rhetoric toward a study of Greek life and thought. His editions of Terence, Aristophanes, and other Greek comedies were invaluable contributions to classical scholarship, while his never completed edition of the New Testament aimed at a goal reached only one hundred years later.⁴⁸

The same instinct for truth led him to abjure sentiment concerning the great epic poets, and approach them with common sense. In his *Remarks upon a Discourse of Free Thinking*, by Anthony Collins, he assails that liberal minded gentleman with the most enlightened and historic interpretation of Homer yet uttered:

Homer's Iliad he [Collins] admires as the epitome of all arts and sciences. . . . Well, where are the footsteps of this vast knowledge in Homer? . . .

To prove Homer's universal knowledge, *a priori*, our author says *he designed his poems for Eternity, to please and instruct mankind*: nothing less than all ages and all nations were in the poet's foresight. Though our author vouches that he *thinks every day de quolibet ante*; give me leave to accept Homer; for he never thought of him or his history. Take my word for it, poor Homer in those circumstances and early times, had never such aspiring thoughts.

He wrote a sequel of songs and rhapsodies, to be sung by himself for small earnings and good cheer at festivals and other days of merriment; the *Iliad* he made for men; and the *Odysseys* for the other sex. These loose songs were not collected together in the form of an epic poem till Pisistratus' time above five hundred years after. Nor is there one word in Homer that presages or promises immortality to his work. . . . He no more thought at that time that his poems would be immortal, than our free thinkers now believe their souls will; and the proof of each will be *a parte post*, in the event, but not in the expectation.⁴⁹

Bentley's masterly criticism of the classics did not revolutionize a public always slow to see new light. While a few Moderns adopted his views, the great majority of conservative scholars remained inert. Fifty years from the date of the *Dissertation*, the authenticity of *The Epistles of Phalaris* still had defenders;⁵⁰ while as late as 1804, Richard Cumberland in publishing the *Memoirs* of his grandfather half apologizes for maintaining his view. Indeed not until the time of Wolf and Niebuhr did Bentley's scientific attitude prevail. This fact reveals him even more saliently as a pioneer; and while like his great predecessors in allied fields, he sometimes drew false conclusions, his principle remained as the foundation of future criticism of classical literature.

Most of all, in our estimate of him in perspective, we are impressed with the spirit of the man. Bold, slashing, free — Greek — he seems some great explorer in the wilderness of seventeenth century Hel-

lenism. With a breadth of view equal to his energy, he never lost vision of the whole, although basing his work upon detail. Jebb sagely doubts that Bentley had a temperament adapted to fishing, and this his admirers may well concede. But whatever the personality so assailed by Tory opponents, his work remains as the first great monument of the science of Criticism applied to Classical Literature, while that "Search after truth" so valiantly announced in the *Preface* to his *Dissertation* continued his guiding motive throughout life.

It is a paradox of life that the quarrel between the Ancients and Moderns has been rendered immortal not by the erudition of Bentley, but by the genius of Swift. The writings of the Great Dean upon this subject are an abiding evidence that an onlooker sees more clearly and in better perspective than a combatant. Although ostensibly supporting the Ancients, Swift is on neither side; but like a superman, seated far above the fray, smiles down upon the petty vanities of earth. No greater contrast of spirit and approach exists than that of Bentley and Swift. The Master of Trinity heart and soul in the moment, looms in attack clear, concrete, scientific. The Dean of Dublin aloof, disdainful, wields the weapon of genius — Satire. So far does genius transcend mere learning, that in the perspective of time it is not the erudite Bentley around whom the controversy grows salient; but it is Swift who be-

comes the logical nucleus of thought. As one looks back across the centuries, two works only shine luminous from the dust,—*The Battle of The Books* and *The Tale of a Tub*. So true is this that many a man who has never heard of Wotton or little Boyle, and who associates Fontenelle only with the French Academy, visualizes the whole combat of the Ancients and Moderns through the matchless satire of Swift.

The Dean's interest in the subject, felt early in life, was only a by-product of more vivid occupations. It will be remembered that the discussion over Temple's *Essay upon Ancient and Modern Learning* was at its height from 1692 to 1699. Swift's writings penned in 1696 and 1697, resulted from a desire to defend his noted patron; but although in private circulation earlier, they were not published until 1704,⁵¹ when the heat of the dispute had somewhat abated. While the work professes to favour the Ancients, its spirit is in reality modern; for it censures the adherents of Bentley for the very errors of which their antagonists were accused.

Sir William Temple had interspersed with his *Reflections* certain statements which appear somewhat inconsistent with his general trend. He had thrown off in passing the remark that books do not advance science, and except as "The Registers of Time," are not an aid to Learning. He had asserted that too much knowledge from the Ancients weakens invention and impedes "Native Force";

while "genius" rather than "derived strength or power" advances civilization.⁵² Uniting these random ideas, Swift weaves them into a marvelous fabric which reveals in full absurdity the mental limitation of those petty pedants who would estimate the merit of a book by reference to its age. Combined with this, is scathing comment upon the modern critic who conceives of his function as purely destructive, and the commentator who instead of his author, interprets himself. In the same vein he lashes those who seek short cuts to culture through indexes and summaries. As a whole Swift's work defies analysis. One might as well attempt to dissect a lightning flash. So far as he took sides at all, his sympathy appears to be with Sir William Temple and the great classical writers in whose defense he wrote. We judge, too, from passing comments that he had no conception of the significance of the physical discoveries of his age. They appear to be outside the range of his immediate interest. Thus he good-naturedly satirizes Harvey, and consigns Aldovandi of Bologna to the tomb of his own accumulated researches in Natural History.⁵³ Neither does he offer serious refutation of the Modern claim, nor like Wotton furnish data to justify his convictions. He does not even take the question seriously. But we do not criticise him for that. One does not censure a darting, flashing airship above a cloud for not being a tugboat on a lake. To him the whole conflict is merely a game; as if he played at battledore

and shuttlecock — both factions deserving laughter because so insignificant and ridiculous — the Moderns in addition meriting disdain for their crudity and conceit.⁵⁴ Under the sweep of his irresistible satire, the whole puny question of the Ancients and Moderns seems to dissolve in inextinguishable laughter. And such was the historic effect. For while in 1705, William Wotton published *A Defense of the Reflections with some Observations upon The Tale of a Tub*, and certain other dull works bearing upon the subject appeared between that time and 1732,⁵⁵ yet the zest of the conflict ebbed with *The Battle of the Books*. Whether this was due to amusement caused by the satires, or to the increasing interest in scientific discovery and Deism, we need not attempt to decide; we may simply reflect that Cervantes in Spain laughed Chivalry away.

The Tale of a Tub, although ostensibly an allegorical satire upon the Roman Church,⁵⁶ contains interspersed in the form of "Digressions" those incisive criticisms of Modern Learning which bind the book to the quarrel in hand. In the author's Apology preceding the Dedication, he states his reasons for writing:

By the assistance of some thinking and much conversation, he [the author] had endeavoured to strip himself of as many real prejudices as he could. I say real ones because under the notion of prejudices, he knew to what dangerous heights some men have proceeded. Thus prepared, he thought the

manners and gross corruptions in Religion and Learning might furnish matter for a satire that would be useful and diverting. He resolved to proceed in a manner that should be altogether new. . . . The abuses in Religion, he proposed to set forth in the Allegory of the Coats and the three Brothers. . . . Those in Learning he chose to introduce by way of digressions.⁵⁷

The assertion that the present age is altogether unlearned and devoid of writers in any kind, Swift declares is a statement "so bold and so false that . . . the contrary may almost be proved by uncontrollable demonstration."⁵⁸

There is a person styled Dr. B-tl-y, who has written near a thousand pages of immense erudition, giving a *full and true account* of a certain squabble of wonderful importance between himself and a bookseller. He is a writer of infinite wit and humour; no man rallies with a better grace and in more sprightly turns. Further, I avow to Your Highness, that with these eyes I have beheld the person of William W-tt-n, B.D., who has written a good sizable volume against a friend of your Governor,⁵⁹ . . . in a most gentlemanly style, adorned with the utmost politeness and civility; replete with discoveries equally valuable for their novelty and use, and embellished with traits of wit so poignant and so apposite that he is a worthy yokeman to his aforementioned friend.⁶⁰

Why should I go upon farther particulars, which might fill a volume with just eulogies of my contemporary brethren? I shall bequeath this piece of justice to a larger work, wherein I intend to write a character of the present set of wits in

our nation: their persons I shall describe particularly and at length, their genius and understanding in miniature.⁶¹

In his Preface, Swift continues:

The wits of the present age being so very numerous and penetrating, it seems the grandees of Church and State begin to fall under horrible apprehensions, lest these gentlemen, during the intervals of a long peace, should find leisure to pick holes in the weak sides of Religion and Government. To prevent which, there has been much thought employed . . . upon certain projects for taking off the force and edge of those formidable enquirers, from canvassing and reasoning upon such delicate points. . . . It is intended that a large Academy be erected capable of containing nine thousand seven hundred forty and three persons; which by modest computation is reckoned to be pretty near the number of current wits in this island. These are to be disposed in the several schools of this academy, and there pursue those studies to which their genius most inclines them.⁶²

Meanwhile, until the perfecting of the above great plan, Swift set himself to divert and keep from mischief "those unquiet spirits" by recounting *The Tale of a Tub*. In the execution of this task, he stipulates:

There are certain common privileges of a writer, the benefit whereof, I hope, there will be no reason to doubt; particularly, that where I am not understood, it shall be concluded that something very useful and profound is couched underneath; and again, that what ever word or sentence is printed in a different character, shall be judged to contain something extraordinary either of wit or sublime.⁶³

As for the liberty I have thought fit to take of praising myself, . . . I am sure it will need no excuse, if a multitude of great examples be allowed sufficient authority. For it is here to be noted, that praise was originally a pension paid by the world; but the moderns, finding the trouble and charge too great in collecting it, have lately bought out the fee-simple; since which time, the right of presentation is wholly in ourselves.⁶⁴

In introducing his three Oratorical machines, erected "for the benefit of Aspiring Adventurers, who desire to talk much without interruption,"⁶⁵ Swift explains that since many great moderns of Grub Street⁶⁶ have been lost sight of and forgotten, in order that the world may no longer suffer such lapses, he has been prevailed upon after much importunity "to travel in a complete and laborious dissertation upon the prime productions" of that society. He begs leave, therefore, to present,

The Hind and Panther. This is the masterpiece of a famous writer now living, intended for a complete abstract of sixteen thousand school-men from Scotus to Bellarmin.

Also

The Wise Men of Gotham, cum appendice. This is a treatise of immense erudition, being the great original and fountain of those arguments, bandied about both in France and England, for a just defense of the moderns' learning and wit, against the presumption, pride, and ignorance of the ancients. This unknown author has so exhausted the subject that a penetrating reader will easily discover what-

ever has been written since upon that dispute to be little more than repetition.⁶⁷

The story of the Three Brothers, beginning in Section II, is so well known as to render a summary unnecessary; moreover, the scope of the present book admits only a discussion of the criticisms upon modern learning. Almost at the beginning, Swift mercilessly scores pedants and commentators: "But about this time it fell out that the learned brothers aforesaid had read Aristotle's *Dialectica*, and especially that wonderful piece *De Interpretatione*, which has the faculty of teaching its readers to find out a meaning in everything but itself, like Commentators on the Revelations, who proceed prophets without understanding a syllable of the text."⁶⁸

Swift then passes to a digression upon Critics in which he satirizes intellectual pretense. Here as always, piercing through veneer, his censure falls upon shallow pretenders to criticism, rather than upon the function itself. That his chief antagonists could not be justly accused of the offenses which he stigmatizes does not detract from the brilliancy of his remarks. He points out that "a critic who sets up to read only for an occasion of censure and reproof is a creature as barbarous as a judge who should take up a resolution to hang all men who came before him upon trial." He declares that the Modern is a direct descendant of the true ancient Critic. "Every true critic is a hero born, descend-

ing in a direct line from a celestial stem by Momus and Hybris, who begat Zoilus, who begat Tigellius, who begat Etcaetera the Elder, who begat Bentley and Rymer, and Wotton and Perrault and Dennis."

Swift next proceeds "to refute the objections of those who argue — that the very art of criticism as now exercised is wholly modern."

I confess to have for a long time borne a part in this general error: from which I should never have acquitted myself but through the assistance of our noble Moderns! whose most edifying volumes I turn indefatigably over night and day, for the improvement of my mind and the good of my country. These have with unwearied pains made many useful searches into the weak sides of the Ancients, and given us a comprehensive list of them. Besides they have proved beyond contradiction that the very finest things delivered of old, have been long since invented, and brought to light by much later pens; and that the noblest discoveries those Ancients ever made of art or nature, have all been produced by the transcending genius of the present age. Which clearly shows how little merit those ancients can justly pretend to; and takes off the blind admiration paid them by men in a corner, who had the unhappiness of conversing too little with present things. Reflecting maturely upon all this, and taking in the whole compass of human nature, I easily conclude that these Ancients, highly sensible of their many imperfections, must needs have endeavoured . . . to obviate, soften, or divert the censorious reader, by satire upon the critics, in imitation of their masters, the Moderns. . . .

Here I found to my great surprise that although they all entered . . . into particular descriptions of the true critic

. . . yet whatever they touched of that kind, was with abundance of caution, adventuring no farther than mythology and hieroglyphic. . . . Now the reason why those ancient writers treated this subject only by types and figures, was because they durst not make open attacks against a party so potent and terrible . . . ; whose very voice was so dreadful that a legion of authors would tremble and drop their pens at the sound; for so Herodotus tells us expressly in another place, how a vast army of Scythians was put to flight in a panic of terror by the braying of an ass.⁶⁹

Turning to the pretensions made by modern writers of outdoing the ancients, Swift declares:

When I consider how exceedingly our illustrious Moderns have eclipsed the weak glimmering lights of the Ancients, and turned them out of the road of all fashionable commerce to a degree that our choice town wits of most required accomplishments are in grave dispute whether there have been ever any Ancients or no: in which point we are likely to receive wonderful satisfaction from the most useful labors and lucubrations of that worthy Modern, Dr. Bentley, I say, when I consider all this, I cannot but bewail that no famous modern hath ever attempted a universal system in a small portable volume, of all things that are to be known, or believed, or imagined, or practised in life.

I must needs own that it was by the assistance of this arcanum, that I . . . have adventured upon so daring an attempt, never achieved or undertaken before but by a certain author called Homer, in whom, though otherwise a person not without some abilities, and for an Ancient, of a tolerable genius, I have discovered many gross errors, which are not to be forgiven his very ashes, if by chance there are any of

them left. For whereas, we are assured he designed his work for a complete body of all knowledge, human, divine, political and mechanic, it is manifest he hath wholly neglected some and been very imperfect in the rest. . . . A defect indeed for which both he and all the ancients stand most justly censured by my worthy and ingenious friend Mr. Wotton, Bachelor of Divinity, in his incomparable treatise on *Ancient and Modern Learning*: a book never to be sufficiently valued, whether we consider the happy turns and flowings of the author's wit, the great usefulness of his sublime discoveries upon the subject of flies, or the laborious eloquence of his style. And I cannot forbear doing that author the justice of my public acknowledgments for the great helps and liftings I had out of his incomparable piece while I was penning this treatise.

But besides these omissions in Homer, already mentioned, the curious reader will also observe several defects in that author's writings for which he is not altogether accountable. For whereas every branch of knowledge has received such wonderful acquisitions since his age, especially within the last three years, . . . it is almost impossible he could be so very perfect in modern discoveries as his advocates pretend. We freely acknowledge him to be the inventor of the compass, of gunpowder, and the circulation of the blood; but I challenge any of his admirers to show me, in all his writings, a complete account of the spleen. Does he not also leave us wholly to seek in the art of political wagering? What can be more defective and unsatisfactory than his long dissertation upon tea? . . .

After ridiculing those Moderns who boast of being wiser than the Ancients because born at a later period

of time, Swift passes rapidly to an assault upon shallow learning.⁷⁰

The whole course of things being thus entirely changed between us and the Ancients, and the Moderns wisely sensible of it, we of this age have discovered a shorter and more prudent method to become scholars and wits, without the fatigue of reading or thinking. The most accomplished way of using books at present is twofold; either first, to serve them as some do lords, learn their titles exactly, and then brag of their acquaintance. Or secondly, which is indeed the choicer, the profounder, and politer method, to get a thorough insight into the index, by which the whole book is governed and turned like fishes by the tail. For to enter the palace of learning at the great gate requires an expense of time and forms; therefore men of much haste and little ceremony, are content to get in by the back door. . . . What remains therefore but that one last recourse must be had to large indexes and little compendiums? Quotations must be plentifully gathered, and booked in alphabet; to this end, though authors need be little consulted, yet critics and commentators and lexicons carefully must. . . .⁷¹

By these methods, in a few weeks, there starts up many a writer capable of managing the profoundest and most universal subjects. For what though his head be empty provided his commonplace book be full; and if you will bate him but the circumstances of method, and style, and grammar, and invention; allow him but the common privileges of transcribing from others, and digressing from himself, . . . he will desire no more ingredients towards fitting up a treatise that shall make a very comely figure on a bookseller's shelf, there to be preserved neat and clean for a long eternity.⁷²

In his interesting Digression upon Madness, Swift gives his view of philosophy. He declares that all great innovators have been somewhat abnormal mentally; and that the chief philosophers, both ancient and modern, "were usually mistaken by their adversaries, and indeed by all except their own followers, to have been persons crazed or out of their wits. . . . Of this kind were *Epicurus*, *Diogenes*, *Apollonius*, *Lucretius*, *Paracelsus*, *Descartes*, who if they were now in the world, tied fast, and separate from their followers, would in this our undistinguishing age, incur manifest danger of phlebotomy, and whips, and chains, and dark chambers, and straw." ⁷³

Yet none of these great prescribers have ever failed of providing themselves with implicit disciples; the reason for this being that "there is a peculiar string in the harmony of human understanding," which, struck in the presence of two individuals of the same tuning, will respond in harmony; but if one chances to jar the string among those of different pitch, "instead of subscribing to your doctrine they will tie you fast, call you mad, and feed you with bread and water. It is therefore a point of nicest conduct, to distinguish and adapt this noble talent with respect to the differences of persons and times. . . . For . . . it is a fatal miscarriage so ill to order affairs, as to pass for a fool in one company, when in another, you might be treated as a philosopher. . . ."

This indeed was the fatal mistake of that worthy gentleman, my most ingenious friend, Mr. Wotton; a person in appearance ordained for great designs, as well as performances; whether you will consider his notions or his looks. Surely no man ever advanced into the public with fitter qualifications of body and mind for the propagation of a new religion. Oh, had those happy talents, misapplied to vain philosophy, been turned into their proper channels of dreams and visions. . . . The base detracting world would not then have dared report that something is amiss, that his brain has undergone an unlucky shake; which even his brother modernists themselves, like ingrates, do whisper so loud that it reaches up to the very garret I am now writing in.⁷⁴

In "A farther Digression," foreseeing the attack of "a certain paltry scribbler" upon his treatise, the author flees "for justice and release into the hands of that great rectifier of saddles, Dr. Bentley, begging that he will take this enormous grievance into his most human consideration."⁷⁵ He then returns to *The Tale of the Three Brothers*.

This inimitable satire needs no interpretation; he who runs may read. Its supreme genius lies in its application to the spiritual Ancients and Moderns of each succeeding age; while its searching analysis of the fallacy of any educational method which attempts to build without foundation, is perennially apropos. That the criticism did not justly apply to his two noted opponents, is a negative factor. For Swift and his readers are so swept on by the joy of his wit, that they forget the reality of his contestants.

As we turn next to *The Battle of the Books* written one year later, we seem to pass from the exceeding bitterness of the earlier mood to some lighter encore, staged to release us from contemplation of too much woe of life. If intellectual reality is a tragic thing, Swift can at least play with tragedy. So pigmy man is ranged in mock heroic battle to try out his petty question of prestige.

“The quarrel first began about a small spot of ground lying . . . upon one of the two tops of the Hill Parnassus, the highest and largest of which had, it seems, been time out of mind in quiet possession of certain tenants, called the Ancients, and the other was held by the Moderns.”

It came about in time that the Moderns demanded of the Ancients that they level their summit, since it obstructed the lower view. Upon the Ancients steadfastly refusing to comply, a long and obstinate war ensued. “Rivulets of ink” were exhausted, and “the violence of both parties enormously augmented.” Now it must be understood that ink is the great weapon in all battles of the learned. Into the books he writes is wonderfully instilled the spirit of each great warrior, and after death, his soul transmigrates to his writings stored in some vast library, there to inform them. Of recent times, a new species of controversial work instinct with a more malignant spirit, has entered into residence; and it was due to this fact that the terrible fight occurred between the Ancients and Moderns in the King’s

Library at St. James. The strife is believed to have originated through spontaneous combustion caused when Bentley was "so careless as to clap Descartes next to Aristotle"; while poor Plato got inadvertently lodged between Hobbes and The Seven Wise Masters, and "Virgil was hemmed in with Dryden on the one side and Withers on the other." Both infuriated factions began maneuvering in charges and countercharges. Temple overhearing the disturbance, immediately reported to the Ancients, he himself "being their greatest favourite, and becoming their greatest champion."

Battle appeared imminent; but for the moment both sides halted, listening to an unexpected quarrel between a spider and a bee.⁷⁶ "For upon the highest corner of a large window of the library there dwelt a certain spider swollen up to the first magnitude by the destruction of an infinite number of flies. The avenues to his castle were guarded with turnpikes and palisades after the modern way of fortifications."

Thither it was the pleasure of fortune to conduct a wandering bee, to whose curiosity a broken pane in the glass had discovered itself, and in he went. The bee having broken the spider's web, a vivid altercation ensued. The spider, in whom one sees the Modern Wit, assailed the bee, bidding him respect his betters:

What art thou but a vagabond, without house or home, without stock or inheritance? Born to no possession of

your own, but a pair of wings and a drone pipe. Your livelihood is a universal plunder upon nature, a freebooter over fields and gardens; and for the sake of stealing will rob a nettle as easy as a violet. Whereas I am a domestic animal, furnished with a native stock within myself. This large Castle (to show my improvements in Mathematics) is all built with my own hands, and the materials extracted altogether out of my own person.

I am glad, answered the bee, to hear you grant at least that I come honestly by my wings and my voice; for then, it seems, I am obliged to heaven alone for my flights and my music; and Providence would never have bestowed on me two such gifts, without designing them for the noblest ends. I visit indeed all the flowers and blossoms of the field and garden; but whatever I collect there enriches myself without the least injury to their beauty, their smell, or their taste. Now for you, and your skill in architecture and the Mathematics I have little to say: In that building of yours, there might for aught I know, have been labour and method enough; but by woful experience for us both, it is plain the materials are naught, and I hope you will henceforth take warning, and consider duration and matter, as well as method and art. You boast indeed of being obliged to no other creature, but of drawing and spinning out all from yourself; that is to say, if we may judge of the liquor in the vessel by what issues out, you possess a good plentiful store of dirt and poison in your breast. . . . So that in short the question all comes to this: whether is the nobler being of the two, that which by a lazy contemplation of four inches round, by an over-weening pride, feeding and engendering on itself, turns all into excrement and venom, producing nothing at all but flybane and cobweb; or that which by a universal

range, with long search, much study, true judgment, and distinction of things, brings home honey and wax.

The dispute assuming so interesting a nature, the two armies of books stood in silent attention below, until Aesop mightily pleased made application to themselves:

Pray, gentlemen, was ever any thing so modern as the spider in his air, his turns, and his paradoxes? He argues in behalf of you, his brethren, and himself, with many boastings of his native stock and great genius; that he spins and spits wholly for himself. . . . Yet if the material be nothing but dirt spun out of your own entrails, . . . the edifice will conclude at last in a cobweb, the duration of which, like that of other spiders' webs, may be imputed to their being forgotten . . . or hid in a corner. . . . As for us, the Ancients, we are content, with the bee, to pretend to nothing of our own but our wings and our voice, that is to say, our flights and our language. For the rest, whatever we have got has been by infinite labour and search, and ranging through every corner of nature; the difference is, that instead of dirt and poison, we have rather chosen to fill our hives with honey and wax, thus furnishing mankind with the two noblest things, which are sweetness and light.⁷⁷

" 'Tis wonderful to conceive the tumult arisen among the books upon . . . this long descant of Aesop; both parties took the hint " and prepared for open battle. Tasso, Milton, Dryden and Withers lead the heavy horse, and Cowley and Desperaux the light.⁷⁸ Then came the bowmen under their valiant leader Descartes, whose strength was

such that they could shoot their arrows beyond the atmosphere, never to fall down again, but turn, like Evander, into meteors; or like cannon-balls, into stars.

The army of the Ancients was much fewer in number; Homer led the heavy horse, and Pindar the light. Euclid was chief engineer, Plato and Aristotle commanded the bowmen; Herodotus and Livy the foot; Hippocrates the dragoons. The allies led by Vossius and Temple brought up the rear.

Meanwhile Fame, apprehensive of the coming conflict, flew straight with the news to Jupiter; and Momus, patron of the Moderns, hied him for aid to the goddess Criticism.

She dwelt on the top of a snowy mountain in Nova Zembla; there Momus found her extended in her den. . . . At her right hand sat Ignorance, her father and husband, blind with age; at her left, Pride her mother, dressing her up in the scraps of paper herself had torn. There was Opinion, her sister, light of foot, hoodwinked and headstrong, yet giddy and perpetually turning. About her played her children, Noise and Impudence, Dulness and Vanity, Positiveness, Pedantry and Ill-Manners. The goddess herself had eyes like a cat; . . . Her eyes turned inward as if she looked on herself.

Upon hearing Momus' message up rose the goddess in a rage:

'Tis I, said she, who give wisdom to infants and idiots; by me children grow wiser than their parents; by me beaux

become politicians, and school boys judges of philosophy; by me sophisters debate and conclude upon depths of knowledge; and coffee-house wits instructed by me can correct an author's style, and display his minutest errors without understanding a syllable of his matter or his language. . . . 'Tis I who have deposed wit and knowledge from their empire over poetry, and advanced myself in their stead. And shall a few upstart Ancients dare oppose me? ⁷⁹

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"The destined hour of Fate being now arrived; the fight began." Aristotle drew his bow at Bacon, but missed the valiant Modern, and the arrow went whizzing over his head. "But Descartes it hit; the steele point quickly found a defect in his headpiece, . . . and went in at his right eye. The torture of pain whirled the valiant bowman 'round 'til death like a star of superior influence, drew him into his own vortex."

Then at the head of the cavalry Homer appeared, "on a furious horse, with difficulty managed by the rider himself, but which no other mortal durst approach. He rode among the enemy's ranks, and bore down all before him." . . . "First Gondibert" he overthrew, horse and man to the ground, "there to be choked in the dirt." Then Denham, a stout modern, "fell and bit the earth." Next "Homer slew Wesley, with a kick of his horse's heel; he took Perrault by mighty force out of his saddle, then hurled him at Fontenelle, with the same blow dashing out both their brains!"

. . . Day being far spent, and the numerous forces of the Moderns half inclining to a retreat, there issued forth from . . . a squadron, a captain whose name was Bentley, the most deformed of all the Moderns; tall, but without shape or comeliness, large, but without strength or proportion. His armour was patched up of a thousand incoherent pieces, and the sound of it as he marched, was loud and dry. . . . The generals made use of him for his talent of raillery, which kept within government, proved frequently of great service to their cause; but at other times did more mischief than good; for at the least touch of offense, . . . he would, like a wounded elephant, convert it against his leaders.

After a quarrel with Scaliger⁸⁰ over possession of the spoils, Bentley "choked with spleen and rage," withdrew in quest of great achievement. With him for aid and companionship went his beloved Wotton. "So marched this lovely, loving, pair of friends" till in the distance they beheld "two shining suits of armour" hanging from an oak, while near at hand their owners Phalaris and Aesop lay fast asleep. As Bentley paused to steal those glorious outfits,⁸¹ Wotton passed on to the fountain-head of Helicon. There he discovered the two noble champions Temple and Boyle; and as the former "drank large draughts of inspired water," the puny Modern timorously took aim. Away the lance went, "hissing at the belt of the averted Ancient" whence it fell unheeded in impotence to the ground. But the god Apollo, enraged that weapon from so corrupt a hand should pollute his waters,

commanded Temple's comrade, young Boyle, to take immediate revenge.

Boyle, clad in a suit of armour which had been given him by all the gods,⁸² immediately advanced upon the trembling foe, who now fled before him. As a young lion in the Libyan plains or Araby desert, sent by his aged sire to hunt for prey . . . so Wotton fled, so Boyle pursued. But Wotton, heavy armed and slow of foot, began to slack his course, when his lover Bentley appeared, returning laden with the spoils of the two sleeping Ancients. Boyle observed him well, and soon discovering the helmet and shield of Phalaris his friend, both . . . lately with his own hand new polished and gilded; Rage sparkled in his eyes, and leaving his pursuit of Wotton, he furiously rushed out against this new approacher. Fain would he be revenged on both. . . . So Boyle pursued, so fled the pair of friends. Finding at length their flight was vain, they bravely joined and threw themselves in phalanx. . . . Then Boyle, observing well his time, took up a lance of wondrous length and sharpness; and as this pair of friends compacted stood close side by side, he wheeled him to the right, and with unusual force darted the weapon. . . . As when a skillful cook has trussed a brace of woodcocks, he with iron skewer pierces the tender sides of both, their legs and wings close pinioned to their ribs; so was this pair of friends transfixed, till down they fell, joined in their lives, joined in their deaths, so closely joined that Charon would mistake them both for one, and waft them over Styx for half his fare. Farewell beloved loving pair! Few equals have you left behind; and happy and immortal shall you be, if all my wit and eloquence can make you so.

The Battle of the Books was the last significant work published in England upon the merits of the Ancients and Moderns. It may well have appeared to readers then as now, that nothing more remained to be said. To measure the influence of Swift's Satire upon the controversy, would be futile as well as impossible. It flashes out at the culmination of the conflict like a brilliant searchlight on the river illuminating for the moment the solid substructure of Bentley and Wotton; and despite its partisan nature, it remains as a contribution to the cause of sane judgment and unbiased perspective in any age.

IV

THE LITERARY PHASE (CONTINUED)
— FONTENELLE

IV

THE LITERARY PHASE (CONTINUED) — FONTENELLE

It will be recalled that in the writings of the great Descartes half a century earlier, England's sister kingdom had discovered those dynamic ideas which broke the spell of the classics in Philosophy and Science, and directed French thought into new uncharted seas. It was by one of those paradoxes so common in the history of the intellect, that at the very moment when France was repudiating the old authorities in Metaphysics and Physics, she was in Poetry and Oratory placing herself under the dominance of that literary regime designated later as the Classical Era of Louis Fourteenth. The same period which witnessed the foundation of the French Academy of Sciences,¹ saw also the culmination of the work of Boileau, of Racine, of Molière. Their ideals of literary form were assumed to be modeled upon the Classics, while very many of their themes certainly were inspired by pagan literature. One might even go so far as to state that the whole scheme of Neo-Classicism was the result of a pushing to the extreme those tenets of correct form derived

from the Ancients, until the French out-classicized the classics themselves. It will be recalled also that it was Boileau and Racine who flew to the rescue when the first light missiles of attack assailed the armour of the ancient gods. Thus the student of thought is safe in assuming that the influence of classical standards upon French taste was at its height when the famous revolt of Perrault and Fontenelle occurred.

Severed from petty detail and regarded in perspective, the criticism of classical authors entailed in this insurrection, implied merely an extension of the spirit and method of Descartes. The event was inevitable, and the circumstances attending it although interesting, are accidental. For the whole episode was an outcome of that new spirit which with the prescient vision of Bacon entered into the history of thought. One Frenchman there was among the contestants, whose long life and varied personality covered and embodied the multiple expressions of the new attitude. That orientation of ideas which in England produced a Bentley, in France produced a Fontenelle. Therefore it is, that a study of the life and writings of this author reveals in miniature all important phases of thought connected with the classical defection in France.

When the amiable Charles Perrault in January, 1687, read before the French Academy his little poem upon the Ancients and Moderns, the nascent hostility between the two factions leaped into life.

“ La belle antiquité, fût toujours vénérable,
[declaimed Perrault]

Mais je ne crus jamais qu'elle fût adorable.

Je vois les anciens sans plier genoux ;

Ils sont grand, il est vrai, mais hommes comme nous.”

Perrault then compared the ages of Pericles and Augustus with that of Louis Fourteenth, and extolling the vastness of modern discovery, pointed out the gross errors under which the Ancients laboured, and from which man had but recently recovered:

“ Dans l'enclos incertain de ce vaste univers,
Mille mondes nouveaux ont été découverts,
Et de nouveaux soleils, quand la nuit tend ses voiles
Égalent désormais le nombre des étoiles . . .
L'homme de mille erreurs autrefois prévenu,
Et malgré son savoir à lui-même inconnu. . . .”

This composition, inciting to anger the devotees of Ancient Poetry in the Academy, produced the famous quarrel participated in by Racine, and rendered piquant by the epigrams of Boileau. Passing over the negligible events of that tempest in a teapot, we may proceed to examine those vital ideas which lay behind the skirmish, and which are significant in relation to classical criticism. These ideas, as previously stated, may best be apprehended through the life and writings of Fontenelle.

As we turn to the works of that gifted stylist, we discover an intellect embodying the scientific ideal. It is in his labour for the French Academy of

Sciences that this spirit shines preeminent; and in the Preface to its memorable History are found the grave and beautiful words which form the keynote of his life: ²

On a quitté une physique stérile, et qui depuis plusieurs siècles en était toujours au même point; le règne des mots et des termes est passé, on veut choses; on établit des principes que l'on entend, on les suit; et de là vient qu'on avance. L'autorité a cessé d'avoir plus de poids que la raison; ce qui était reçu sans contradiction, parce qu'il l' était depuis longtemps, est présentement examiné et souvent rejeté."

It was the above principle relentlessly applied in all fields of thought, which became the motive force of Fontenelle's activity. Through it, fearless and devoid of reverence, he approached each hoary institution and subjected it to the test. Through it he foresaw that infinite vista of progress which a generation later inspired Condorcet. Through it he tore the veil from religious mystery and exposed it to the light. By an extension of this same principle he advanced to the domain of classic literature and penetrated the nebulous englamoured atmosphere which for centuries had enveloped it. This too must be submitted to the test of science, and satisfy the challenge of reason, of law, and of progress. Hence approaching every heroic concept expressed in the Greek and Roman language, he stripped it of magic and subjected it to pitiless scrutiny. That to rob life of illusion is to despoil it of verity, and that

everything human is what it is, plus its potential something more, Fontenelle did not see. Nor did he realize that a literature expressive of emotion can no more be bound by inflexible rule than life can so be bound. This astigmatism, the reader comes to feel, was Fontenelle's limitation; but his outlook was consistent, and if impotent to discern the glamour of "Old unhappy far-off things, and battles long ago," he yet boldly visualized the progress of those ideas which led to the Encyclopedists and intellectual emancipation at the end.

In *Nouveaux Dialogues des Morts*,³ 1683, we find Fontenelle's earliest and most flippant examination of ancient culture. The derision in this work is directed not against any specific deficiency, but against the whole content of classic myth and story. Legends of the gods, achievements of heroes, the charm of beauty half divine — all are swept into one scathing fire of ridicule. Borne on by the spell of his sprightly style, the reader laughs with the author until a whole Wonder-World lies despoiled at his feet.

The first dialogue opens with a conversation between Alexander the Great and Phryne in which they compare the merits of their respective occupations upon earth. At Alexander's somewhat scoffing comment upon the great beauty's vocation she retorts that it was as good as his own, and far less destructive; she declares that only beauty could repair the desolation which his valour wrought:

And you are mightily satisfied that you made a desert of the best part of the Earth? . . . I know what you are going to say now; *Greece, Asia, Persia, The Indies*, all these make a fine show. But then let me only take from you what you have a right to, and distribute fairly to your officers, your common soldiers, and to fortune herself, their proper shares of the Glory, and do you think this won't take you down a little, and make you something more slender? Now a handsome woman owes her conquests to herself, and nobody comes in for a share with her. . . . But to run raving up and down and not know whither, to fight and take towns and not know why; and to be always in a hurry of action about nobody knows what; 'tis this has offended the men of sober sense.

“Sober Sense” again derides the pretense of great conquerors, in the dialogue between Augustus and Peter Aretin,⁴ where the latter jeers at the “fustian praises” heaped upon the Roman monarch, and declares that in his day, instead of bestowing panegyrics upon rulers, he lampooned them. In satire one may respect the person attacked, but in flattery “one cannot avoid having mean thoughts of the persons they are put upon, and taking them in one's heart for downright bubbles.”

I wonder with what face Virgil could tell you it was a matter of debate what place you would accept of among the Gods; whether you'd be pleased to take upon you the charge of the Earth, or become a God of the Sea, by espousing one of the daughters of Thetis who would willingly give all her waters for the honour of your alliance? Or in fine, whether you would take up your apartment in Heaven near the

Scorpion . . . who upon your approach would contract his claws to make room for you?

Augustus sagely replies that "Alas! Vanity has a thousand shifts." But that in one sense he has suffered for his fame; for later and inferior princes have often been compared with him. Peter rejoins that he may take comfort. For "Louis XIV, now reigning in France, . . . will be looked upon hereafter as the model of princes, and I foresee that in future times the highest compliment that can be made them will be to compare them to this mighty prince." ⁵

In the same spirit, reverence for Homer and the lofty themes of the Trojan War are turned into contempt. Aesop comments upon the fact that all the virtuosos of his day asserted that Homer had implied great mysteries in his works:

There was not a line in *The Iliad* nor the *Odyssey* but they fitted it with the quaintest allegories in the World. They maintained that there was no secret in Divinity, natural and moral Philosophy, and the Mathematics to boot, but was fairly implied in your Writings. Some difficulty there was in unraveling; and it may be where one sophister had found a moral meaning, another discovered a natural one. But they agreed in this, that you knew all things, and said all things, to those of an enlightened understanding.

Homer replies:

Without lying, I always suspected some people would spy out mysteries in my works that I never apprehended myself.

. . . There's no way like uttering fables without design, and leaving the Allegory to be made hereafter.

[Aesop] How! Pray what do you say for the brawls of your Deities, that maim one another? Your thundering Jupiter that in a full convocation of the Gods, threatens the august Juno to curry her into better manners; and that same Bully Mars, who when he was wounded by Diomedes roared out full as loud as nine thousand men, yet shew'd not the courage of one. For instead of hewing all the Greeks into shivers, his head's taken up about his wound, and making his *Misereres* to Jupiter. Do you think all this could have passed muster without allegory?

[Homer] Why not, I pray? . . . Men, it seems, are well enough pleased that their gods should be as great fools as themselves; but by no means that the beasts should be as wise.

Likewise the comments of Helen and Fulvia upon the Trojan War are of a nature calculated to make Sir William Temple gasp. The peerless heroine of the *Iliad*, and the subject of Isocrates' *Encomium*, is pictured in a bourgeois conversation with Fulvia in which the latter expatiates:

In earnest, I think they were all out of their wits, both Greeks and Trojans. The first were mad for demanding you, and the others yet madder for keeping you. How in the name of wonder could so many men of worth sacrifice themselves to the pleasures of an inconsiderate young rake. . . . I could not forbear laughing when I read that passage in Homer, where after nine years' war and a late battle in which a world of men were lost, a council is held before Priam's palace. There Antenor is for resigning you, and there was nothing that I can see to be opposed to it. . . .

However Paris is pleased to signify that he does by no means approve the proposal. And Priam, who (if you take Homer's word for it) is a match for the Gods in wisdom, being in a might perplexity . . . gives orders that they should all adjourn and be gone to supper. . . .

'Tis very necessary for the honour of the most virtuous events that the causes of them should be concealed.

As the characters of gods and heroes are rendered ridiculous, so is the lofty tradition of virtue among classic women. Lucretia is cynically criticised for not committing suicide more promptly; Fulvia is portrayed as inciting Marc Antony to Civil War because Augustus "was too nice."⁶ Dido in a conversation with Stratonice is in high dudgeon because Virgil has depicted her as in love with Aeneas, whereas in real life she had burned herself alive in order to avoid a second marriage:

A certain Poet named Virgil has been pleas'd to transform me from a grave discreet person into an arrant coquette that lets herself run mad for the handsome mien of a stranger the first day she sees him. All my History's turn'd topsie-turvey. . . .

[Stratonice] For my part, you must excuse me if I would not be bound to answer for you upon the credit of your Wood-pile. Why so hasty? Has he buffooned you? or made you talk like a Fool?

[Dido] Nay, far enough from that; it's the finest part of the poem, where I make my appearance. . . . I am very handsome . . . and I say the finest things in the world.

[Stratonice] I'll not meddle with the controversy. . . .

But I'm sure in common conversation, the first question people ask about a woman . . . is this . . . is she handsome? The second — Has she wit? And it's very rare for them to ask a third!

The vanity of ancient philosophers and the sharp contrast between their pretentious theory and actual life is pointed out in *Anacreon and Aristotle*, where the great Stagirite contemptuously sniffs at the lyricist:

I could never have imagined that a little scribbler of sonnets would have dared to rank himself with a philosopher of my great reputation. And the poet retorts: —

You make a very lofty sound with that word philosopher methinks; yet your humble servant, with his little sonnets, made a shift to get the name of the Wise Anacreon.

Upon Aristotle's enquiring what he has ever done to merit so great an honour, the poet replies:

Nothing but drink and be merry, sing songs, and make love; and here's the wonder that at this price I purchased the name of Wise, whereas it cost you a world of pains to get only that of Philosopher: For how many whole nights have you sat up beating your brains and winnowing dry distinctions, and crabbed questions in Logic? How many huge unwieldy volumes have you compared upon dark notions that perhaps you yourself ne'er understood with all your poring? . . . To be able to drink and sing like me, one must have disengaged one's soul.

The Divine Plato likewise is pictured as having undergone complete transformation in the Lower

World. In a tête-à-tête with Margaret of Scotland, he confides to that purring idealist that he has utterly changed his mind about Platonic love. Margaret reproaches him:

You certainly meant some other than the common Love, since you have so gloriously described the journeys made by wing'd souls in chariots to the extreme Vault of Heaven where they contemplate Beauty in its Essence; their unhappy fall from so vast an elevation to the distant earth occasion'd by the unruliness of their horses; the tearing of their wings; . . . The recovery of their wings which begin to shoot out again, and with which they endeavour a flight toward what they love. . . .?

[Plato] Upon my honest word now, all this well understood . . . signifies in plain speech no more than that handsome persons are apt to inspire a thousand transports. . . .

[Margaret] How? Is this Plato?

[Plato] The very same.

[She] What, *Plato*? With his square shoulders, his grave air, and all the Philosophy he carried in his head?

[He] Ay.

Even the martyr Socrates is included in the rail-lery, and becomes a humorous illustration of the adulation heaped upon Ancients by Moderns. Our old favourite Montaigne but recently arrived in Hades, and rejoicing in his opportunity to meet a "genuine *Ancient Philosopher* . . . from such a happy age," seeks out the Athenian. Socrates hospitably welcoming the newcomer, enquires if the world is not mightily improved since his day. Mon-

taigne, astounded, declares that on the contrary it has grown ten times more foolish and corrupt. Socrates surprised inquires:

What! have not men by this time shaken off the follies of Antiquity?

[Montaigne] You're an Ancient yourself, and for that reason I suppose may make so bold with Antiquity. But be assured that men's manners are at present a large subject of lamentation, and that all things degenerate daily.

[Socrates] Is it possible? I thought in my time things went as perversely as could be, and was in hopes that at last they would fall into a more reasonable train — and that men would have made their advantage of so many years' experience.

[Montaigne] Alas! What regard have they to experience? Like silly birds they suffer themselves to be taken in the same nets that have caught a hundred thousand of their kind already.

[Socrates] But what's the reason of this? I should think that surely the world in its old age ought to become wiser and more regular than 'twas in its youth.

Montaigne replies that men never learn, and that reason has no power over inclination. Modern times have produced no Aristides, no Phocion, no Pericles, nor . . . a Socrates.

[Socrates] Take care you are not deceived. Had you known Aristides, Phocion, Pericles and myself . . . you would certainly have found some to match us in your own age. . . . Thus when we lived we esteemed our ancestors more than they deserved, and in requital, our posterity esteem us . . . more than we deserve. Yet our ancestors, and we,

and our posterity are all upon the level. . . . The heart, which is the man himself, does not change at all.

In other discussions, Brutus is reproached for murdering Caesar; Paracelsus is jeered at for assuming a Latin name; and Michael Angelo tricks Raphael with the figure of Bacchus. "Here comes prejudice to my aid, and tells me that a fine statue must needs be an antique; this is a decision, and I give judgment." Molière in argument with Paracelsus ridicules our innate love of mystery, and man's pursuit of the Unknowable, when

There are real objects, which if it pleased, would find him sufficient employment. . . . And I'm persuaded that if most people saw the Order of the Universe such as it is without observing the virtue of numbers, the properties of planets, and fatalities link'd to certain Periods or certain Revolutions, they would not be able to forbear saying of this admirable Order, "What! Is this all?"⁸

In the final Dialogue between Cortez and Montezuma, the haughty conqueror reproaches the Mexican with the stupidity of the "Americans" who "imagined the Spaniards were descended from the Region of Fire because of their cannon," and "thought their ships vast birds that flew upon the sea." Montezuma replies that his countrymen showed no greater credulity than the Athenians who allowed Pisistratus to deceive them by dressing up a woman as the goddess Minerva, at whose command they received him back into the city. Nor

was their superstition worse than that of the Greeks who believed the knowledge of futurity to be inclosed in a cave under ground; and that when the moon was in eclipse she could be recovered "out of her fits" "by a hideous noise." Montezuma then clinches the argument by reminding Cortez of "the Holy Chickens, whose appetite decided everything in the Capital City of the whole Earth," and concludes that for every "piece of American folly" the Romans and Greeks had an equal. "'Twas our happiness not to have known there were Sciences in the world; we should not perhaps else have had prudence to forbear being learned." ⁹

Throughout the *Dialogues*, one recognizes that Fontenelle's attack upon the sanctities of ancient culture springs not from a spirit of malevolence, but rather from an intellectual temper, keen, enquiring, and analytical. The fact that the absurdities exposed are not the essential element of classical content, does not diminish their impressiveness; while as a by-product of his investigation, there is thrown into the limelight the tinsel of that ever-present class who capitulate to prejudice and desert reason. One feels, however, that the last-named result was not a vital object of the work. The little book is, rather, a natural fruit of Fontenelle's lively mind at play upon a set of cut-and-dried concepts which lured him to examination.

The same temper of enquiry directed toward other Idols of the Tribe produced three years later his

Entretiens sur la pluralité des mondes, (1686) the *Histoire des Oracles*, (1687) and *De L'Origine des Fables*.¹⁰ The first of these works seeks to penetrate the nature of the universe by the light of new discoveries in the place of ancient preconceptions. The dominant note of the book is that of a limitless opening out of human possibilities and a limitless progress, conceived through the liberation of the intellect by the revolutionizing knowledge recently attained.¹¹ To Fontenelle's perception, the encramping fetters which man's mind had burst asunder were the time-honoured dogmas of classical civilization; and one object of the *Entretiens* is to make clear to ordinary thinkers the obsolescence of these fallacies, and to induce the substitution of New Science in their stead.¹² Thus the book conjoins with the development of classical criticism.

In his sprightly conversations with the charming brunette, solicitude for whose instruction inspires the work, Fontenelle ranges at large over the absurdity of those theories so many centuries cherished as final. He ridicules ancient philosophical explanations regarding the mechanism of the universe; he deplores that infatuation for the mysterious and remote which led men to obscure simple truth; he exposes to laughter those fatuous inventions of Greek scientists concerning the appearance of new phenomena in the sky. He emphasizes the intellectual limitation of a people so grossly ignorant of Geography as the Romans, and comments upon the egotism of an attitude which

regarded the whole universe subjectively, while conceiving no idea of change, or transformation and growth to something better than itself. Good-humouredly jesting at the complacency of the Moderns who still offer incense at the shrine of the Ancients, he infuses into the work an ideal of infinite Progress through infinite reaches of time.¹³ The vitality of his comments may best be appreciated by direct quotations.

With regard to the efforts of Greek sages to explain natural phenomena, he notes:

In thinking on this subject, nature always appears to me from the same point of view as theatrical representations. . . . Figure to yourself as spectators of an opera, the Pythagorases, the Platos, the Aristotles; all these men whose names are now so celebrated. Let us suppose them viewing the flight of Phaeton, rising on the wind; ignorant at the same time of the construction of the theatre and the cords by which the figure is put in motion. One, to explain the phenomenon says, "It is some hidden virtue in Phaeton which causes him to rise"; another replies, "Phaeton is composed of certain numbers which produce his elevation." A third says "Phaeton has a love for the top of the stage; he is uneasy at any other part." The fourth thinks, "It is not essential to the nature of Phaeton to rise in the air, but he prefers flying up to leaving a vacuum at the top of the stage." Such were the ridiculous notions of ancient philosophers, which to my astonishment, have not ruined the reputation of antiquity.¹⁴

In criticising the facility with which they invented astronomical theories, he remarks:

The philosophers to explain some particular motion of the heavenly bodies, placed beyond the heaven that bounds our view a sky of crystal which communicated this motion to the lower sky. Was a new movement discovered? They had nothing to do but form a second crystal firmament. In short skies of crystal were made without any trouble. . . . It was necessary to have a substance at once transparent and solid, for it was Aristotle's opinion that solidity was essential to the dignity of their nature, and as this was believed by a great man, nobody thought of doubting it.¹⁵

Of their absurd beliefs concerning the heavenly bodies, he writes:

A great philosopher of ancient times had informed us that the moon was the dwelling of souls who had on earth rendered themselves worthy of very exalted happiness. He supposes that their felicity consists in listening to the music of the spheres; but that when the moon comes under the shadow of the earth, they are no longer able to hear the celestial harmony, at which time they utter the most piercing cries, and the moon hastens on as fast as possible to relieve them from this agonizing situation.¹⁶

A certain author who believes that the moon is inhabited tells us very seriously that it was impossible for Aristotle to avoid receiving so rational an opinion, (could Aristotle be ignorant of any truth?) but that he never disclosed it for fear of displeasing Alexander who would have been miserable to hear of a world that he could not subjugate.¹⁷

The epoch-long superstition and credulity of the Moderns with regard to classical lore is arraigned as follows:

The generality are affected only by the obscure and marvelous. They admire Nature merely because they consider it a sort of Magic, something too occult for the understanding to reach: to them a thing appears contemptible as soon as they find the possibility of explaining its nature.¹⁸

Again,

The Chinese are gainers by being at so great a distance from us, as the Greeks and Romans were by being separated by a long space of time; whatever is remote assumes the right of imposing on us.

Fontenelle's comments upon the geographical limitation of the Ancients may have had their inspiration from Bacon:

Remember the earth has been made known to us by little and little. The ancients positively asserted that the torrid and frozen zones were uninhabitable from the excessive heat of the one, and cold of the other; and in the time of the Romans the general chart of the world was made little larger than that of their own empire; this at once showed the grand idea they had of themselves and their extreme ignorance of the earth. . . . At one time, it was believed that the ocean covered every part of the earth except what was then known. Antipodes had never been heard of, and who could imagine that men would be able to walk with their heads downwards? Yet after all, the antipodes were found out. Now the map must be altered; a new half added to the earth! . . . These antipodes so unexpectedly disclosed should teach us to think modestly of our own attainments: we may yet know much of our own world, and then become acquainted with the new moon; till that time, we must not expect it, because our knowledge is progressive.¹⁹

No quality of ancient learning so moved our Academician to impatience as its static nature, and conception of the unalterability of the universe. He declares:

The Ancients were so vastly wise as to imagine the heavenly bodies were of such a nature as never to alter because they had not observed any alteration in them. Had they leisure to assure themselves of this by experience? Compared with us the Ancients were young; if flowers that last but a day were to transmit their histories to each other, the first would draw the resemblance of their gardener in a certain way; after fifteen thousand ages of these flowers had elapsed, others would still describe him in the same manner. They would say, "We have always had the same gardener; the memoirs composed by our ancestors prove this to be the case; all their representations exactly apply to him; surely he is not mortal like us; no change will ever take place in him." Would the reasoning of these flowers be conclusive? It would have better foundation than that of the ancients respecting the celestial bodies; and had there never to this day been observed any change in the heavens, . . . I would not yet decide upon them; I should think more experience necessary. Should the term of our existence, which is but a moment, be the measure for other durations? Ought we to assert that what has lasted a hundred thousand times longer than we, must last for ever? No, ages on ages of our duration would scarcely be any indication of immortality.²⁰

Over against this static conception is placed the vision of limitless human progress unfolding through the evolution of the worlds:

The Europeans . . . did not find their way to America till six thousand years had elapsed; they were all that time in learning the art of navigation so completely as to pass over the ocean. . . .

We do more than conjecture the probability of rising in the air. . . . We have actually begun to fly. Several persons have discovered a method of fixing on wings . . . and by their assistance flying over rivers; these new fashioned birds did not to be sure soar like the eagles; . . . but however, these attempts answer to the first piece of wood launched into the water, and served for the commencement of navigation. . . . The art of flying is but in its infancy; in due time it will be brought to perfection, and some day or other we shall get to the moon. Can we pretend to know everything? to have made every possible discovery? Pray let us give posterity leave to make some improvements as well as ourselves.²¹

As one concludes a survey of the material in the *Conversations*, one suddenly realizes that Sir William Temple's criticism ²² that the work contains no original ideas, is justifiable, and that one has encountered only a new presentation of earlier discovered truths. Yet the book doubtless served a more important function in the history of thought than many more original compositions. For its special mission was to popularize the discoveries of the New Astronomy, and by so doing weaken the tenacious grasp of the public upon that older Ptolemaic body of ideas, which prejudice and habit of thought rendered so precious. That the *Conversations* affected

this work the testimony of contemporary English and French writers bears abundant witness.²³

In the following year there appeared the little book whose grave and dignified style is in such striking contrast to the earlier flippancy of *Dialogues des Morts*.²⁴ Viewed from the angle of classical criticism the *Histoire des Oracles* is an extension of Fontenelle's scientific investigation into the field of pagan superstitions.²⁵ Dispelling the halo of poetry and religion, he subjects oracular legends to critical historic research. Going back to the time of Homer and Hesiod, he traces the evolution of the use of oracles through Greek and Roman life until their transposition into the mechanism of the Christian Church. His conclusion is that Oracles were at no time under the inspiration of supernatural agency, but that from the beginning, pagan priests using them as an instrumentality, made men the dupes of their own credulity and ignorance. The significance of the work lies in its effort to draw into popular cognizance and to weaken the hold of, one more set of "prejudices" derived from the Classics. The author's own words best reveal this purpose:

"It is not my design to treat of the history of Oracles directly; I propose only to refute the common opinion which attributes them to demons, and holds that they ceased to exist with the advent of Jesus Christ. But in refuting this belief, it will be necessary to write the entire history of Oracles, and to explain their origin, their progress, the different

forms which they have assumed, and finally their decadence, with the same exactness as if I were treating of these topics in a natural and historical order." ²⁶

As a companion to this dissertation should be placed the little treatise, *De l'Origine de Fables*, in which, stripping from these tales the cloak of mystery and imagination, he endeavours to prove them the outcome of sheer primordial barbarism. That man has later read into them allegory and moral, is due to his own superstition and credulity of the past. Here again the author's keynote is struck — the elimination of prejudice and the duty of man to free his mind from these ancient fetters of fear which have robbed him of intellectual liberty. In establishing his conviction, he asserts:

On attribue ordinairement l'origine des fables à l'imagination vive des Orientaux; pour moi, je l'attribue à l'ignorance des premiers hommes.²⁷

Toutes les métamorphoses sont la physique de ces premiers temps. Les mûres sont rouges, parce qu'elles sont teintes du sang d'un amant et d'une amante; la perdrix vole toujours terre à terre, parce que Dédale, qui fût changé en perdrix, se souvenait du malheur de son fils qui avait volé trop haut; et ainsi du reste²⁸

La second principe qui sert beaucoup à nos erreurs, est le respect aveugle de l'antiquité. Nos pères l'ont cru; prétendrions-nous être plus sages qu'eux? ²⁹

Mais que ne peuvent point les esprits follement amoureux de l'antiquité? On va s'imaginer que sous ces fables sont

cachés les secrets de la physique et de la morale. . . . Le nom des anciens impose toujours: mais assurément ceux qui ont fait les fables n'étaient pas gens à savoir de la morale ou de la physique, ni à trouver l'art de les déguiser sous des images empruntées.³⁰

Ne cherchons donc autre chose dans les fables, que l'histoire des erreurs de l'esprit humain. Il en es moins capable, dès qu'il sait à quel point il l'est. . . . Tous les hommes, se ressemblent si fort, qu'il n'y a point de peuple dont les sottises ne nous doivent faire trembler.³¹

It was in 1788 that there appeared from Fontenelle's pen the little volume which contained the crystallization of his conviction regarding classical literature.³² In his *Digression sur les Anciens et les Modernes* we find clarified and condensed the impressions of the author upon this subject which were scattered at large in earlier writings. Likewise the Discourse, brief though it is, embodies in miniature almost all of the important views upon the same topic held by the writer's contemporary Moderns in France. Hence the Digression may be fittingly used as the culmination of our review of the era of Louis XIV.

As the reader dips into the pages of this little pamphlet, there is again borne home to him the conviction that it is not so much the originality of the material as the author's felicitous and comprehensive expression, coupled with his sweeping outlook upon the future, which gives the work significance. One would be tempted to declare that Font-

enelle's immortality lay in his style, did not one pause to reflect that the ability to synthesize, to clarify, and to hit the nail of expression exactly on the head, is one quality of genius.

We are led happily into the topic by a comparison of the successive stages of history with nature. The author first establishes the hypothesis that nature does not retrograde in any of her material processes, and therefore not in the production of men. Upon this foundation the theory is advanced that in intellectual attainment, each epoch of history progresses beyond the preceding epoch because man has inherited the whole experience of the past, plus an emancipation from many of its errors. Application of this theory of Progress is then made to the fields of ancient poetry, oratory, miscellaneous literature, and science.

In setting forth his first hypothesis, the author tells us that since Nature has not exhausted her power to produce trees equal to those of earlier ages, it is absurd to reason that she has drained herself of the energy to engender peerless men. Those Moderns who maintain that all great Originals were the fruit of ancient days, and regard their thinkers as almost of another species, should be upon their guard. For science does not justify these attractive phrases. It holds rather that Nature has within herself a certain constitution which is always the same, and which ceaselessly fashions and refashions into a thousand forms, men, animals, and plants;

thus we may be assured that Plato, Demosthenes and Homer were not formed of finer or better clay than philosophers, orators, and poets of the present time.³³

In making this statement one does not deny that there are differences in the intellects of men, as there are dissimilarities in plants. The soil of France may not be adapted to the Egyptian method of reasoning any more than to the cultivation of her palms. Just as the oranges of Italy are peculiar to herself, so is her native type of genius. It may be true also that through the interdependence of all parts of the material world, climate as it affects plants, affects the brain of man. This influence is less pronounced, however, because mental qualities are more open to cultivation than an intractable soil; and since ideas are more easily assimilated than vegetation, the French could grasp Italian genius more easily than produce her fruits. The facility with which one mind fashions itself from another causes each people to lose something of the spirit of its original environment; so that in the reading of Greek books, one becomes Greek in proportion as one embraces the Greek spirit. Moreover, in the present discussion it is a fallacy to assert that certain countries are more fitted by nature to produce mental attainment than others, since as a rule each has advantages and disadvantages which offset others. While some give vivacity, others give equity; so that in the case of equally cultivated minds a difference of climate is a negligible quantity. Perhaps there should be men-

tioned as an exception to this rule, the Torrid and two Arctic zones, which hitherto have never produced the Sciences, these latter having been limited to an area between Mt. Atlas and the Baltic Sea.

Viewed with this geographical and historic background, the great question of the Ancients and Moderns becomes clear. The lapse of the ages does not make any natural difference between men. The climates of Greece, Italy, and France are too adjacent to create any sensible difference between the Greeks, Latins, and ourselves. Moreover did such differences exist, they would be easily effaced, and would be no more to the advantage of the Adriatic countries than to our own. We, therefore, are all perfectly equal — Ancients and Moderns — Greeks, Latins, and French.³⁴

“I do not assert that this reasoning will appear convincing to everyone. If I had used lofty detours of eloquence; had compared some features of history creditable to the Moderns with others honorable to the Ancients, and had set up in opposition passages favorable to either side,—if I had called those scholars coxcombs who term us ignorant and superficial in spirit; and according to established law among men of letters, had rendered abuse for abuse, my arguments might have proved of better relish. But it seemed to me that if I took up the contest in that manner, it would never come to an end; and that after much beautiful declaiming on either side, we should be astonished to find ourselves no whit

advanced. I believe that a more direct course would be to look into the physical side of the question — which method possesses the secret of cutting short disputes which rhetoric renders endless.”³⁵

Having indulged in this slight digression in favor of science as opposed to rhetoric, Fontenelle resumes the main theme: If once we recognize the natural equality between the Ancients and ourselves, the whole problem vanishes, and one clearly sees that all the dissimilarities, whatever they are, may have been caused by different circumstances, such as the times, the government, and the state of general affairs. The claim so insistently advanced by partisans of the Ancients that they had so much more inventive power and spirit than we, holds only in that they were our predecessors in time. One might as well extol them for having drunk the first waters of our rivers, and abuse us because we imbibed only what was left. Had we lived in their time, we should have been inventors; had they lived in ours, they would have rejoiced at that which they found already invented: there is no great mystery in that. . . . Archimedes placed in the infancy of the world would have been able to invent only the plough; but born in another age, he burned the vessels of the Romans with his mirrors.— If indeed that report is not all a fable. One might add to the glory of the moderns that early discoveries are more easily made than later, because that which remains for investigation after each achievement, is worn more thread-

bare, and its secrets are more hidden from the eye. To offset this, it might be suggested that while modern research requires a greater effort of mind, yet one finds increased facility for the task, and a mental outlook clarified through work already accomplished. Thus it is that if we of today surpass the first inventor, it is he who has aided us to go beyond him, and he has always his share in our glory.

One might even push the justice of this point so far as to compute to the ancients an infinite number of false views which they have held, of bad reasonings which they have made, and of foolish things which they have uttered. Such is the intellectual condition of man that it does not permit him to arrive at once at a reasonable opinion of any question whatever. It is necessary beforehand, that he wander about a long time and pass through diverse kinds of errors and diverse stages of foolishness. It should always have been easy, so it seems, for man to perceive that the whole game of Nature consists in the forms and movements of matter. Nevertheless before attaining that he had to try out the Ideas of Plato, the Numbers of Pythagoras, and the Categories of Aristotle. . . . In short we are under obligation to the Ancients for having exhausted a great part of the false ideas possible to be conceived. It was absolutely necessary to pay to error and ignorance the debt which they paid, and we ought not to fail in recognition of those who have acquitted us. Thus with minds clarified through the views of the

Ancients, and even through their mistakes, it is not surprising that we should surpass them. For merely to equal them would be to imply that we were of a nature far inferior to theirs, and almost that we were not men as well as they.³⁶

Nevertheless in order that the Moderns should always improve upon the Ancients, there are needed circumstances of a kind to permit it. Eloquence and poetry require only a certain number of data delimited by contact with the other arts, and dependent principally upon vivacity of imagination. Now men should have been able in a few ages to amass those few necessary opinions, while vivacity of imagination does not require long experience nor a great number of rules to perfect itself. But Physics, Medicine and Mathematics are made up of an infinite number of acquired facts and are dependent upon an exactness of reasoning which perfects itself with extreme slowness, but approaches nearer perfection always. Moreover this often needs to be aided by experience to which chance alone gives birth, and which was not sought at the instant made. Therefore the last physician or mathematician is naturally the more skillful, and in consequence — the vital principle in philosophy which influences everything — the method of reasoning is most perfected in the present century.

I doubt, Fontenelle continues, if the majority of people will concede to the remark I am going to make; yet for the benefit of those who understand

reasoning I will make it; and I can boast that for the sake of truth I have courage to expose myself to a not indepracable number of critics. Upon whatever subject it may be, the Ancients are not given to perfected reasoning. Often there passes among them for proof, feeble expedients, petty analogies, a shallow play of mind coupled with vague and confused discussion. Thus it costs them nothing to furnish a seeming proof. And what pain do they not cause the poor Modern? We long that they be intelligible, exact, and come to a conclusion. Before the time of Descartes, men reasoned more comfortably. Past ages were happy in not possessing such a man; for it is he who has introduced the new method of reasoning — more admirable than his philosophy, which has often proved fallacious. As a consequence there reigns not only in our best books in Physics and Metaphysics, but in Religion, Morals, and Criticism, a preciseness and balance hitherto little known. Moreover, I am persuaded that this will go farther. We shall some day be Ancients; and will it not be proper that posterity shall in turn correct and surpass us? Especially in the matter of reasoning, which is a science in itself, and that the most difficult and least cultivated of all?

In regard to eloquence and poesy which are the principal objects of contention — although not in themselves highly important — I believe that the Ancients might perhaps have attained perfection, because as I have said, those subjects require only

a few centuries for consummation — precisely how long I do not know. I stated that the Greeks and Latins ought to have been excellent poets and orators; but were they? To clear up that point it would be necessary to go into an infinite discussion, which however just and exact, would never satisfy the partisans of Antiquity; for they are resolved to pardon everything in the ancients and to admire them unreservedly. This is particularly the spirit of the commentators, a class the most superstitious of all the ancient cult. What passion so tender and vivid as a Greek or Latin inspires in his respectful interpreter?

Nevertheless I shall speak a little more definitely on the subject of oratory and poetry: I find that in these the ancients excelled, and that Cicero and Demosthenes are more perfect in their kind than Homer and Vergil in theirs. The reason is natural enough: Rhetoric led in the republics of Greece and among the Romans; it was then as much an advantage to be born with a talent for eloquence as it would be today to be born with an immense income. Poetry on the contrary was worth nothing; and this is always the case in that kind of a government. Again, it appears to me that with the exception of tragedy, the Greeks yield in Poetry and Oratory to the Latins. According to my particular taste Cicero surpassed Demosthenes; Vergil, Theocritus and Homer; Horace improved upon Pindar, and Livy and Tacitus upon the historians of Greece. In the

system which we have established, this was the natural order; the Latins were the Moderns in respect to the Greeks. But since Eloquence and Poesy are sufficiently circumscribed, there should come a time when they reach final perfection; and I hold that for oratory and history this was the age of Augustus. One can imagine nothing superior to Tacitus and Livy. It is not that they have no faults, but that one cannot conceive of fewer defects with so large a proportion of great qualities.

The most beautiful versification in the world is that of Vergil. Perhaps, however, it would not have been a bad thing if he had had the leisure to retouch it. There are some great bits in the Aeneid of a perfect beauty which I do not believe has ever been surpassed. As for the general order of the poem — I should not be much surprised if Vergil were outdone. Our romances, which are poems in prose, have already shown us the possibility.

My design is not to push the criticism farther; I wish merely to make it clear that since the Ancients might have attained perfection in certain things, but did not, we ought in seeking to discover whether they reached perfection, to harbor no blind respect for their great names, and have no indulgence for their faults, but to treat them exactly as Moderns.

Il faut être capable de dire ou d'entendre dire, sans adoucissement, qu'il y a une impertinence dans Homère ou dans Pindare; il faut avoir la hardiesse de croire que des yeux mortels peuvent apercevoir des défauts dans ces grands

génies; il faut pouvoir digérer que l'on compare Démosthène et Cicéron à un homme, qui aura un nom français, et peut-être bas: grand et prodigieux effort de raison! ³⁷

Upon that subject I cannot restrain a smile at the caprices of men. Prejudice for prejudice, it would be more reasonable to maintain the advantage for our Moderns. They ought naturally to have gone beyond the Ancients. That favorable presumption should be the foundation. On the contrary, what are the foundations which men build for the Ancients? — Their names — which sound greater in our ears for being Greek or Latin; the reputations which they had of being the first men of their age; the number of their admirers which has had time to increase through the long succession of years. All that considered, we ought still more to be prepossessed for the Moderns; but men, not satisfied to give the preference to prejudice over reason, go on to choose the most unreasonable prejudices of all.

The claim made by partisans of the Ancients that the reading of classical authors dispelled the ignorance following the barbarian invasions, I well concede. It restored to us all at once those ideas of truth and beauty which we should have been a long time recovering, but which in the end, had we searched well, we should have recovered without the aid of the Greeks and Latins. They themselves groped long before they apprehended these ideas, and we should have found them as did they. The mind-life of the ages may be compared to that of a

single man: it has its infancy where it is occupied only with the pressing needs of life; its youth when it succeeds to things of the imagination, such as poesy and eloquence, and where it even begins to reason, but with less soundness than fire. It is now in the age of virility where it reasons with more power and brilliancy than ever before; but it would have advanced still farther had not the passion for war occupied man so long and given him a scorn for the sciences, from which he has at length recovered. That is to say,—to abandon the allegory—man should never degenerate, and the sane views of all good minds, as they succeed each other, should ever augment the knowledge of preceding ones.

That incessantly enlarging mass of opinions which must be followed and of rules which must be practised, increases continually the difficulty of all classes of sciences and arts. But on the other hand, new facilities spring up to compensate for these difficulties. To illustrate: in the time of Homer it was a great marvel for a man to be able to adjust his discourse to measure, to long and short syllables, and at the same time make something rational. Poets were given infinite license, and men considered themselves happy to have verse. Homer used in a single line five different dialects; that is to say, he spoke Picard, Gascon, Norman, Breton and common French. He shortened and lengthened syllables at will; no one thought of censuring him. That strange confusion of tongues, that bizarre assem-

blage of words wholly disfigured was the language of the gods.

Little by little men came to recognize the ridiculousness of the licenses accorded to poets. One after another they were retrenched, and today, despoiled of their ancient privileges, poets are reduced to speaking in a natural manner. It would appear that the meter would now be greatly impaired and the difficulty of making verses very great. No; for our minds are enriched by an infinite number of poetic ideas furnished us by the ancients, and we are guided by a great quantity of rules and reflections made upon that art. As Homer lacked all those aids he was justly compensated by the license which he was allowed to take. I suspect, however, to speak the truth, that his situation was more enviable than ours; this kind of compensation is not very exact.

Mathematics and Physics are the sciences whose yoke lies always upon the scholar. The same spirit which perfects things furnishes new means of embracing new attitudes of mind, and these produce new sciences. A scholar of the present century knows ten times more than one in the Age of Augustus; but he has ten times the facility for acquiring knowledge.

In virtue of these compensations and to requite us for the esteem which we have paid our predecessors, we may hope that excessive admiration will be accorded us in ages to come. Men will study to find in our works beauties which we did not at all

claim to put there. Those indefensible defects which the author freely acknowledges today will find some champions of a courage invincible. And God knows with what scorn they will point out in contrast with us the beautiful minds of that time, which perhaps may well be Americans. Thus it is that the same prejudice abases us in one age in order to exalt us in another; thus one becomes first the victim and then the divinity.

It would be possible to push the prediction even farther, and state that there was a time when the Latins were the Moderns and complained of the infatuation felt by their contemporaries for the Greeks. Owing to the lapse of ages both have become ancients and we worship both without discrimination. But as between Ancients and Moderns, it would be out of order for the latter to excel. We need only to have patience until through the long process of centuries we become contemporaries of the Greeks and Romans; then, it is easy to see, men will not scruple in many instances boldly to prefer us. The best works of Sophocles, Euripides, and Aristophanes confer little more enjoyment than *Cinna*, *Horace*, *Ariane*, the *Misanthrope*, and a great number of other tragedies and comedies. I do not believe that *Theagenes and Chariclea*, *Cleitophon and Leucippe*, were ever comparable to *Cyrus*, *Astree*, *Zaide*, or the *Princess of Cleves*.

There are also some new forms of literature such as letters of gallantry, fairy tales and operas, of

which each has furnished an excellent author with whom antiquity has nothing to compare, and whom apparently posterity will not surpass. Nor can the more evanescent songs to which we pay little attention be outclassed. Of these we have a prodigious quantity all full of fire and spirit; and I insist that if Anacreon had known them, he would have sung them in preference to many of his own. Through various works of poetry we see that versification today may have as much nobleness, but at the same time more correctness and exactitude than ever before. I purpose to avoid details and parade our riches no farther. But I am persuaded that we are like the grand seigneurs who do not always take pains to hold to exactitude in the register of their goods, and who are ignorant of a part of their wealth.

If the great men of this present century had some charitable sentiment for posterity, they would caution it against admiring the past, and inspire it always to at least equal its predecessor. Nothing has so arrested progress and limited the mind as our excessive admiration of the Ancients. Because men have bowed to the authority of Aristotle and have sought for truth in his enigmatic writings and never in nature, not only has philosophy been retarded, but she has fallen into an abyss of nonsensical and unintelligible ideas from which it required every effort in the world to extract her.

Aristotle never made a true philosopher, but he

has stifled many a one who might have become such, had he been permitted.

“ Et le mal est qu’une fantaisie de cette espèce une fois établie parmi les hommes, en voilà pour longtemps: on sera des siècles entiers à en revenir, même après qu’on en aura reconnu la ridicule.” ³⁸

Yet if we hope for the praise of posterity, it must be acknowledged that there is no certainty that future generations will compute as merit in us the two or three thousand years which will intervene between their time and ours. There is every indication that reason is perfecting herself, and that men will become universally disabused of their gross prejudice for antiquity. Perhaps it will not persist much longer; perhaps at the present hour we admire the ancients in vain, and without creating for posterity the obligation to accord us adulation in return. And that would be a little sad.³⁹

Should we distil into a single sentence the essence of *The Digression*, one might term it an exposition of Fontenelle’s theory of Progress, including a special application to classical literature. Under the latter topic are found his most vivid utterances, while as a by-product, there is presented in miniature the claim of that body of Vernacular prose and verse to which Descartes had alluded, and at which earlier writers had cast a passing glance. It is characteristic of Fontenelle that in a few short pages we find epitomised the sum total of the principles advanced by literary Moderns in France. With whatever

reservation the reader follows his comments upon classical writers, he feels that here at least the topic finds significant and final expression; while deeper than language, there speaks that aspiration toward perfect liberty which was its author's passion. Reflecting upon this *Digression*, one perceives the entire literary revolt in France as a phase of a greater revolt. One recognizes that the classical controversy was — in Fontenelle's own words — “not so highly important,” but an emanation from that larger movement poignant with possibility and fraught with revolution in the end. The rebellion in France against Hellenistic writers emerges suddenly as a repudiation of that Spirit of the Past which had held man supine — in eternal negation of his will to be free.

One hundred years of profitable living had elapsed since the birth of Fontenelle when in 1757 he vanished into that background of predecessors whose veneration he had so disdained. During that century what changes the Europe of Galileo's old age had known. One by one there had been cast from her intellect the fetters of subserviency in physics, logic, science, philosophy, mathematics, astronomy, and literature. Already the petty quarrel of the French Academy had dissolved into those larger issues of which it was but an ephemeral expression. Voltaire was at his zenith, and three volumes of *Diderot's Encyclopedia* had been given to the press. Already native languages in other countries were

being considered feasible for works of learned and permanent value. Authority in the old sense was a thing of the past.

While the classical yoke in letters still lay upon England, below the surface there steadily increased in volume a newer, less articulate mood. Many an obscure university student entering into his heritage of Hellenism, found there emancipation from humanism and form; while already Ramsay and Collins had sounded the knell of the era of Pope.⁴⁰ Pushed to its relentless conclusion, the spirit of science reacting upon the literary tradition in England produced the Romantic School; but History demonstrates that it rediscovered the beauty and freedom of Hellenism on the way. And it is not without significance that the last young god of the new Olympus has rendered immortal a faithful but dull translation, while his loveliest ode is dedicated to the beauty of a Grecian Urn.

Until we can do without a thing we do not possess it. Looking back over the slow process of emancipation from classical formula, it would appear that not until men had disavowed servitude to the dogma of Hellenism, did the spirit of Hellas reappear. It was the special prerogative of the seventeenth century thinkers to divide the waters of bondage and lead toward a vision of the promised land. It seems not too much to say that not only an appreciation of Vernacular literature, but the whole brilliant

thought-world of constructive criticism from Niebuhr to Murray, lay nascent in the travail of those earlier prophets — in Bacon, Galileo, Descartes, Bentley, Swift and Fontenelle.

NOTES

NOTES

CHAPTER I

¹ Paetow, Louis John, *The Arts Course at Mediaeval Universities*, University of Pennsylvania, 1910, p. 12.

² Schultze, Fritz, *Geschichte der Philosophie der Renaissance*, Bd. I, Jena, 1874, p. 11, *et seq.*

³ The work ascribed to Dionysius the Areopagite, originated probably in the fourth or fifth century; the writer was a transcendental pantheist; he combined Christianity and Neo-Platonism, and drew from Plotinus and Iamblichus.

⁴ Schultze, Fritz, *op. cit.*, p. 11.

⁵ Rashdall, *Universities of Europe*, vol. i, p. 351-7.

⁶ Died in Caliphate of Bagdad, 1036 A.D.

⁷ Schultze, Fritz, *op. cit.*, pp. 11-12.

⁸ Schultze, Fritz, *op. cit.*, p. 13.

⁹ *Opus Majus*, Part II, (Bridges ed.), iii, pp. 69-70.

¹⁰ *Compendium Studii*, Brewer, p. 469.

¹¹ *Ibid.*

¹² *Il Convivio*, Treatise I, ch. x, xi. The Provençal was being praised by some Italians.

¹³ *Il Convivio*, ch. xii, Wicksteed's ed., pp. 55-60.

¹⁴ *Ibid.*, ch. xii, p. 60.

¹⁵ See Robinson, J. H., and Rolfe, H. W., *Francesco Petrarca, The First Modern Scholar* (2nd ed.), Putnams, 1914.

¹⁶ Before Aldus only two Greek Classics — Homer and Theocritus — had been printed. Aldus issued 33 first editions, including Aristophanes, Sophocles, Herodotus, Demosthenes, Pindar, and others.

¹⁷ Schultze, Fritz, *op. cit.*, p. 80.

¹⁸ *Ibid.*, pp. 76-77.

¹⁹ See Vespasiano's lists of the manuscripts contained in famous libraries, as given in his *Lives*.

²⁰ Examples of its victims are Giordano Bruno, Reuchlin, Galileo.

²¹ See Castiglione, *Il Cortegiano*, and W. H. Woodward, *Vittorino da Feltre*.

²² *De Ratione Studii*, 522 A-E. "For I affirm that with slight qualification, the whole of attainable knowledge lies enclosed within the literary monuments of Ancient Greece. This great inheritance I will compare to a limpid spring of whose undefiled waters it behooves all who truly thirst to drink and be restored."

²³ In a *Paracelsis*, or *Exhortation to a Study of the Christian Philosophy*, prefixed to the first edition of the *Novum Instrumentum*, 1516.

"For I utterly dissent from those who are unwilling that the sacred Scriptures should be read by the unlearned, translated into the vulgar tongue; as though Christ had taught such subtleties that they can scarcely be understood even by a few theologians, or as though the strength of the Christian religion consisted in men's ignorance of it. The mysteries of kings it may be safer to conceal, but Christ wished his mysteries to be published as openly as possible. I wish that even the weakest woman should read the Gospel—should read the Epistles of Paul—and I wish that they were translated into all languages, so that they might be read and understood, not only by Scots and Irishmen, but also by Turks and Saracens. *To make them understood* is surely the first step. . . . I long that the husbandman should sing portions of them to himself as he follows the plough, that the weaver should hum them to the time of his shuttle, that the traveller should beguile with their stories the tedium of his journey. . . . This kind of philosophy lies rather in the affections than in syllogism; it is a life rather than a disputation, an inspiration rather than an argument."

(I have used Mr. Seebohm's rendering in *The Oxford Reformers*.)

²⁴ *To Councillors of all the States of Germany*, 1524.

²⁵ *Fluge und Vermahung gegen die Ungeistlichen Geistlichen*. See also *Die Anschauenden*.

²⁶ Quoted in Ranke, Leopold, *History of the Reformation in Germany*, London, 1845-47, vol. iii, p. 492.

²⁷ Montaigne lived during the Religious Wars in France. He was saddened and made hopeless by the cruelty and intolerance on each side. He died just as the wars of the Three Henrys were about to come to an end. (1592 A.D.)

²⁸ Montaigne, *Essays*, vol. iii, p. 242, London, 1913, The Cotton Translation.

²⁹ *Ibid.*

In his infancy Montaigne heard only the Latin language spoken by an attendant especially chosen for the purpose. Montaigne thus literally knew Latin several years before he spoke French. See his essay on *The Education of Children*.

³⁰ He does, however, allude to Xenophon's *Cyropaedia* in his essay, *The Education of Children*.

³¹ Montaigne, *Essays*, vol. i, p. 161.

³² Montaigne, *Essays*, vol. i, pp. 165-6, Cotton Translation.

³³ *Ibid.*, p. 168.

³⁴ *Ibid.*, pp. 170, 175.

³⁵ *Ibid.*, vol. i, pp. 366-7.

³⁶ *Ibid.*, vol. i, p. 134.

³⁷ *Ibid.*, vol. ii, p. 179.

³⁸ *Ibid.*, vol. ii, p. 248.

³⁹ *Ibid.*, vol. iii, p. 379.

⁴⁰ *Ibid.*, vol. ii, p. 242.

⁴¹ *Ibid.*, vol. ii, p. 243.

⁴² *Ibid.*, vol. ii, p. 262.

⁴³ *Ibid.*, vol. ii, p. 231.

⁴⁴ *Ibid.*, vol. iii, p. 378.

⁴⁵ *Ibid.*, vol. iii, p. 381.

⁴⁶ *Ibid.*, Montaigne's attitude about the Calendar was similar to that of some farmers with regard to the "Daylight saving law," but with less justification on the ground of practical inconvenience.

⁴⁷ *Ibid.*, vol. ii, p. 279.

⁴⁸ *Ibid.*, vol. ii, p. 280.

CHAPTER II

¹ Copernicus' theory appeared in its final form in 1543. Galileo's discovery of the laws of falling bodies was made in 1596. Bruno was burned at the stake in 1600. Kepler's *Dioptrics* appeared in 1611.

² For the contrast in the general attitude, see Montaigne, *Essays*, and Bacon, *Advancement of Learning*, as compared with Sir Wil-

liam Temple, *Essays*, and William Wotton, *Reflections upon Ancient and Modern Learning*.

³ "I propose to establish progressive stages of certainty." *Novum Organum*, Author's Preface, *Philosophical Works of Bacon*, (Robertson's ed.) London, 1905, p. 256.

⁴ *De Augmentis Scientiarum*, Book IV, *ibid.*, p. 478.

⁵ *Novum Organum*, cxvi, *ibid.*, p. 294.

⁶ "The human understanding is unquiet; it cannot stop or rest; and still presses onward, but in vain. Therefore it is that we cannot conceive of any end or limit of the world; but always of necessity it occurs to us that there is something beyond." *Novum Organum*, xlviii, *ibid.*, p. 266.

⁷ *Parasceve*, *ibid.*, p. 405.

⁸ *Author's Preface to The Great Instauration*, *ibid.*, p. 246.

⁹ *Ibid.*, p. 247.

¹⁰ *The Advancement of Learning*, *ibid.*, p. 80; p. 96; *The Great Instauration; Proemium*, p. 241; *Novum Organum*, p. 262, xxxi; p. 286, xc; *Parasceve*, p. 403.

¹¹ Rawley, W., *The Life of The Right Honourable Francis Bacon*, 1667, p. 3.

¹² *Ibid.*, p. —. His father had been counsellor of Elizabeth. His mother was a daughter of Sir Anthony Cooke, "A choice Lady and eminent for piety and learning."

¹³ *Ibid.*, p. 2.

¹⁴ *Advancement of Learning*, Book II, *op. cit.*, p. 76. We find here for the first time frankly suggested a more modern course of study in the colleges, to take the place of the mediaeval one based upon the Trivium and Quadrivium.

¹⁵ *Ibid.*, p. 80.

¹⁶ *De Aug. Scien.*, *ibid.*, p. 441, xxvi. "I take them to be a kind of breath from more ancient traditions, which fell into the pipes of the Greeks."

¹⁷ *De Aug. Scien.*, *ibid.*, pp. 600-604.

¹⁸ *De Aug. Scien.*, Book viii, *ibid.*, p. 616.

¹⁹ *De Aug. Scien.*, Book viii, *ibid.*, p. 566.

²⁰ *The Author's Preface to the Great Instauration*, *ibid.*, p. 243.

²¹ *Novum Organum*, *ibid.*, xxi, p. 276.

²² *Ibid.*, p. 288.

²³ *Ibid.*, xcvi, p. 289.

²⁴ *Ibid.*, xcv, p. 291.

²⁵ *Ibid.*, lxii, p. 271.

²⁶ *Ibid.*, cxxviii, p. 300.

²⁷ *Ibid.*, p. 280.

²⁸ *Ibid.*, p. 276.

²⁹ *Ibid.*, lxxxii, p. 280.

³⁰ *Proemium, Magna Instauratio, ibid.*, p. 241.

³¹ *De Augmentis Scientiarum, ibid.*, p. 635.

³² *De Augmentis Scientiarum, ibid.*, p. 630. *Advancement of Learning, ibid.*, p. 167.

³³ *Novum Organum, ibid.*, pp. 257-258.

³⁴ *Ibid.*, cxxii, p. 297. "Relying on the evidence and truth of things, I reject all forms of fiction and imposture; nor do I think that it matters any more to the business in hand whether the discoveries that shall now be made were long ago known to the Ancients . . . than it matters to mankind whether the new world be that island of Atlantis with which the Ancients were acquainted, or new discovered for the first time. For new discoveries must be sought from the light of nature, not fetched from the darkness of antiquity."

³⁵ *De Augmentis Scientiarum, ibid.*, xxvii, pp. 523-24. "The noblest Grammar would be a comparative study of many tongues showing defects and beauties of each, and drawing conclusions as to a language the most beautiful of all."

³⁶ *Novum Organum, ibid.*, pp. 256-257. "Let there be, therefore . . . two streams and two dispensations of knowledge; and in like manner two tribes or kindreds of students in philosophy . . . tribes not hostile or alien . . . but bound together by mutual services. Let there in short be one method for the cultivation, another for the invention of knowledge." *Vide*, eloquent conclusion, p. 258.

³⁷ *Novum Organum, ibid.*, p. 288.

No one has more succinctly stated the situation than quaint Abraham Cowley in his delicious Ode:

"Bacon, like Moses, led us forth at last;
The barren Wilderness he past;
Did on the very Border stand
Of the blest promised land;
And from the Mountain Top of his exalted Wit,
Saw it himself, and shew'd us it.

.

But Life did never to one Man allow
 Time to Discover Worlds and Conquer too;
 Nor can so short a life sufficient be
 To fathom the vast depths of Nature's Sea.
 The work he did we ought to admire,
 And were unjust if we should more require
 From his few years divided 'twixt th' Excess
 Of low Affliction and high Happiness;
*For who on things remote can fix his sight,
 That's always in a Triumph or a Fight?*"

³⁸ Discovered by him at Pisa, *circa* 1590.

³⁹ Galileo did not fully grasp the nature of a vacuum; Descartes did not accept the Copernican System; Fontenelle clung to Descartes' "Vortex Theory."

⁴⁰ Rawley, W., *Life of Bacon*. "Yet howsoever his body was mortal, yet no doubt his memory and works will live; and will in all probability last as long as the world lasteth."

⁴¹ *Discorsi e dimostrazioni matematiche intorno a due nuove scienze*. He proved that Aristotle's idea that the time of fall varied with the weight of the body was fallacious; and he later demonstrated the law of uniform acceleration.

⁴² *The Sidereal Messenger of Galileo Galilei*, translated by H. F. Carlos, London, 1880.

⁴³ *Dialogo sopra i due massimi sistemi del Mundo, Tolemaico e Copernicano*, Florence, 1632.

⁴⁴ *Vide*, Fontenelle, *Preface de L'Histoire de L'Academie, Oeuvres*, vol. i, p. 1.

⁴⁵ Bacon and Descartes suggest this viewpoint; but their attitude is not an outspoken challenge.

⁴⁶ Both Bacon and Descartes had carefully refrained from laughing at their opponents. But Galileo writes with the freedom of an Italian of the Humanistic Period.

⁴⁷ Galileus Galileus Linceus, *The Systeme of the World; in Four Dialogues*. Found in *Mathematical Collections and Translations, The First Tome*, by Thomas Salusbury, London, 1661.

⁴⁸ *Ibid.* The "Dedication to Sir John Denham," pp. 2-3.

⁴⁹ *Ibid.*, In "To the Reader by the Translator," p. 4, we find in the above, presented in a nutshell, (1) the English ignorance of the vernacular tongues, (2) the prejudice against pedantry, (3)

the class distinction between scholars and "gentlemen," (4) the English tolerance of liberal ideas, (5) salient comment upon French and German intellectual traits.

⁵⁰ *Ibid.*, p. 5.

⁵¹ *Ibid.*, p. 3.

⁵² *Ibid.*, p. 23.

⁵³ *Ibid.*, p. 25.

⁵⁴ *Ibid.*, pp. 37-38.

⁵⁵ Compare Descartes, *The Search for Truth in the Light of Nature*.

⁵⁶ *The Systeme of the World*, pp. 40-42.

⁵⁷ *Ibid.*, p. 43.

⁵⁸ *Ibid.*, p. 44.

⁵⁹ *Ibid.*, p. 93.

⁶⁰ *Ibid.*, p. 94. See also the close of the paragraph.

⁶¹ *Ibid.*, p. 95.

⁶² *Ibid.*, pp. 95-96.

Sagredius fires the parting shot: "What a pity it is that Guns were not used in Aristotle's Age, he would with the help of them have easily battered down ignorance, and spoke without hesitation of these mundane points."

⁶³ *Ibid.*, *Dialogue Three*, p. 250.

⁶⁴ *Ibid.*, *Dialogue Four*, p. 319.

⁶⁵ Descartes, René, *Philosophical Works*, Cambridge, 1911, vol. i, p. 4.

⁶⁶ *Ibid.*, vol. i, p. 6, *Rules for the Direction of the Mind* (written circa, 1628).

⁶⁷ *Ibid.*, vol. i, p. 84, *Discourse on Method*.

⁶⁸ *Ibid.*, vol. i, p. 305, *The Search after Truth by the Light of Nature*.

⁶⁹ *Ibid.*, p. 311.

⁷⁰ *Ibid.*, p. 213.

⁷¹ *Ibid.*, p. 209. See also statement too long for quotation, pp. 208-9.

⁷² *Ibid.*, vol. i, p. 146, *Meditations*.

⁷³ *Ibid.*, vol. i, p. 219, *Principles of Philosophy*.

⁷⁴ *Ibid.*, vol. i, p. 7, *Rules for the Direction of the Mind*.

⁷⁵ *Ibid.*, p. 8.

⁷⁶ *Ibid.*, vol. i, p. 9.

⁷⁷ *Ibid.*, vol. i, p. 10. Said in disparagement of the dialectic method derived from the Ancients.

⁷⁸ *Ibid.*, vol. i, pp. 129-30, *Discourse on Method*.

⁷⁹ "It is much easier to have some vague notion about any subject . . . than to arrive at the real truth about a single question, however simple that may be." *Ibid.*, p. 5. See also vol. i, p. 208, *Author's Letter, Principles of Philosophy*.

⁸⁰ *Ibid.*, vol. i, p. 15; p. 3. Also vol. i, pp. 144-171, *Meditations*.

⁸¹ *Ibid.*, vol. i, p. 83, *Discourse on Method*.

⁸² *Ibid.*, p. 84.

⁸³ *Ibid.*, p. 85. Note that Descartes includes even "Poesy and Eloquence" in his disparagement.

⁸⁴ As late as Fontenelle, it had followers. *Vide, Entretiens sur la Pluralité des Mondes*.

⁸⁵ *Ibid.*, pp. 110-114.

⁸⁶ That is, the belief that beyond the Moon lies an atmosphere "coelestial"—unlike that of the "corporeal" earth—in which exist the planets and the stars. *Vide, Dante, Convivio*.

⁸⁷ *Ibid.*, vol. i, p. 309, *The Search after Truth*.

⁸⁸ *Phil. Works*, vol. ii, p. 348.

⁸⁹ *Encyclopædia Britannica*, (11th ed.), s. v. "Descartes," by William Wallace.

⁹⁰ *Op. cit.*, vol. i, pp. 185-187, *Meditations on First Philosophy*. We recall that Bacon earlier had differentiated into clarity the ancient confusion of Metaphysics and Physics.

⁹¹ Descartes' regard for his early teachers in the Jesuit Order seems to have been enduring and sincere. Fathers Dinet and Mersenne are examples of this friendship.

⁹² Wood, Anthony, *History and Antiquities*, Oxford, II, 2, pp. 836-40. Quoted by Robertson, George Croom, Hobbes, London, 1886, p. 168. Professorships in Geometry and Astronomy were permanently instituted in 1619. When Hobbes was at Oxford, 1603, these subjects were not in the curriculum, and Hobbes never saw a geometry until he was about forty years old. *Vide, Aubrey, John, Life of T. H. of Malmesbury*, cited by Robertson, p. 32.

⁹³ Spinoza and Malebranche are examples of this influence.

⁹⁴ It may be that Plato's requirement of Geometry as a prerequisite to the study of Philosophy appealed to him. He refers

to it several times, e. g., in the *Leviathan*, (Waller ed.), Cambridge, 1904, p. 495.

⁹⁵ *English Works of Thomas Hobbes*, (Molesworth ed.), 1839-45, vol. i, preface, p. 10.

⁹⁶ *Ibid.*, vol. i, p. viii, Author's "Epistle Dedicatory," *Elements of Philosophy*.

⁹⁷ *Ibid.*, vol. i, pp. viii-x.

⁹⁸ *Ibid.*, vol. iii, p. 25, *Leviathan*.

⁹⁹ *Ibid.*, vol. ii, p. 38, *Of Liberty*; vol. iv, p. 103.

¹ *Ibid.*, vol. ii, p. 135.

² *Ibid.*, vol. vi, p. 362, *Behemoth*.

³ *Ibid.*, vol. ii, pp. 153-154.

⁴ *Ibid.*, vol. iii, p. 202, *The Leviathan*.

⁵ *Ibid.*, vol. iii, p. 669, *The Leviathan*.

⁶ *Ibid.*, vol. iv, p. 102, *De Corpore Politico*.

⁷ *Ibid.*, vol. iii, p. 202, *The Leviathan*.

⁸ *Ibid.*, vol. iv, p. 219.

⁹ *Ibid.*, vol. iv, p. 73, *Essay on Human Nature*.

¹⁰ *Ibid.*, vol. ii, p. 153, *Of Dominion*.

¹¹ *Ibid.*, vol. iii, p. 203, *Leviathan*.

¹² *Ibid.*, vol. iii, pp. 314-15.

¹³ Hobbes is as insistent as Bacon upon reform in the Universities, but he is less definite as to subjects in a new curriculum.

¹⁴ Hobbes, Thomas, *Leviathan*, Cambridge, 1904, pp. 527-8.

¹⁵ *Ibid.*, vol. iii, p. 366, *Leviathan*.

¹⁶ *Ibid.*, vol. ii, p. 3, *Of Liberty*.

¹⁷ *Ibid.*, vol. ii, *Philosophical Rudiments*, "Epistle Dedicatory."

¹⁸ *Ibid.*, vol. i, p. x, "Epistle Dedicatory."

¹⁹ *Ibid.*, vol. vi, pp. 184-5, *Behemoth*.

²⁰ Hobbes, T., *Leviathan*, Cambridge, 1904, p. 515.

²¹ *Ibid.*, p. 473.

²² *Ibid.*, p. 456.

²³ *Ibid.*, p. 477.

²⁴ *Ibid.*, p. 487.

²⁵ *Ibid.*, p. 491.

²⁶ *Ibid.*, p. 493.

²⁷ *Ibid.*, p. 494.

²⁸ *Ibid.*, pp. 495-496.

²⁹ *Ibid.*, p. 497.

³⁰ *Ibid.*, pp. 507-508.

³¹ *Ibid.*, p. 516.

³² The English Works of Thomas Hobbes, (Molesworth ed.), 1839-45, vol. vi, p. 276.

³³ An epic poem consisting of fifteen hundred four-line stanzas published by Sir William Davenant in 1651, while he was imprisoned in The Tower. The verse was both admired and ridiculed. The story that Davenant was the son of William Shakspeare is believed to be without foundation.

³⁴ *Ibid.*, vol. iv, p. 456.

³⁵ Hobbes, T., *Leviathan*, Cambridge, 1904, p. 527.

CHAPTER III

¹ Fontenelle, Bernard, *Entretiens sur la Pluralité des mondes*, 1686; and *Digression sur les Anciens et les Modernes*, 1688. The latter affixed to *Poésies Pastorales*.

² Wotton, William, *Reflections upon Ancient and Modern Learning*, London, 1694, p. 5.

³ Temple, Sir William, *Essays on Ancient and Modern Learning*, and *On Poetry*, Edited by J. E. Spingarn, Oxford, 1909. Temple's *Miscellanea*, Part the Second, was first published in 1690. Temple was a cultivated English gentleman famous as a promoter of The Triple Alliance and the marriage of William and Mary. Fastidious in temperament, he retired early from politics and went to live at Moor Park, Surrey, where Jonathan Swift was his secretary, and where he died in 1699. *Vide*, Courtenay, *William Temple*, London.

⁴ Burnet, Thomas, *The Antediluvian World*, 1684. This was an English translation of the first Part of the author's Latin work, the *Sacred Theory of the Earth*, 1681. Fontenelle, Bernard, *Entretiens sur la Pluralité des Mondes*, 1686.

⁵ Temple, Sir William, *Essays*, Oxford, 1909, p. 3. The second work of Fontenelle's which displeased him, was *The Poésies Pastorales* published with *Digression sur les Anciens et les Modernes*, 1688.

⁶ Wotton, William, *Reflections upon the Ancient and Modern Learning*, London, 1694, p. 6.

⁷ Fontenelle, Bernard, *Poésies Pastorales*, published in 1688, con-

tained an embodiment of the author's ideal of verse form as compared with the Ancient.

⁸ Sir William Temple's idea concerning Geography is an almost exact reproduction of Montaigne's. Indeed he seems throughout his work to be strongly influenced by the earlier writer without having his sanity of judgment.

⁹ Temple, Sir William, *Essays*, edited by J. E. Spingarn, Oxford, 1909, p. 33.

¹⁰ *Ibid.*, pp. 52-53.

¹¹ *Ibid.*, p. 53.

¹² For a chronological list of the pamphlets and details of the misunderstanding between Bentley and Boyle, *vide*, Richard Bentley, *Works*, 3 volumes, edited by Dyce, Alex., London, 1836. Preface, vol. i, pp. v-xix.

¹³ An interesting example of this is in his investigation of the sources of our knowledge of Pythagoras.

¹⁴ Perrault, Charles, *Parallèle des Anciens et des Modernes*, 1688.

¹⁵ See summary of Perrault's comparison, in Wotton, p. 46.

¹⁶ Wotton, William, *Reflections on Ancient and Modern Learning*, p. 50.

¹⁷ *Ibid.*, pp. 54-55.

¹⁸ *I. e.*, Book iii.

¹⁹ Wotton, William, *Reflections*, p. 69. In this suggestion, Wotton refers to, and quotes from Perrault, Charles, *Parallèle des Anciens et des Modernes*, pp. 125-9.

²⁰ *Ibid.*, p. 78.

²¹ *Ibid.*

²² *Ibid.*, p. 90.

²³ *Ibid.*, p. 91.

²⁴ Diogenes Laertius, a Greek writer who lived perhaps in the second century A. D.

²⁵ *Ibid.*, p. 103.

²⁶ *Ibid.*, p. 157.

²⁷ *Ibid.*, p. 163. The interesting discussion of "The Invention of Instruments" which follows (p. 169 *et seq.*) is too long to be included here.

²⁸ *Ibid.*, pp. 300-301.

²⁹ *Ibid.*, p. 303.

³⁰ *Ibid.*, p. 329.

³¹ *Ibid.*, p. 316. One feels that he has in mind here his "learned friend Mr. Bentley," altho he is extremely careful throughout his book to be impersonal.

³² *Ibid.*, p. 316.

³³ *Ibid.*, p. 358. Wotton's Essay was published in 1694, almost exactly ninety years from the date of Bacon's *Advancement of Learning*, (1605). Viewed as a whole it seems almost like a summary of the century's achievement in the light of Bacon's ideal.

³⁴ Bentley, *Works*, edited by Alexander Dyce, London, 1836, *A Dissertation upon the Epistles of Phalaris, Author's Preface*, vol. i, pp. ii-xxi. Also, *Ibid.*, *Editor's Preface*, pp. vi to xx.

³⁵ London, 1698.

³⁶ *A Dissertation upon the Epistles of Phalaris, with An Answer to the Objections of the Honourable Charles Boyle, Esquire*. By Richard Bentley, D.D., London, 1699.

³⁷ For ancient legend about Phalaris, *vide*, Jebb, R. C., *Bentley*, pp. 44-45. "All that we really know about Phalaris, however, is that as early as about 500 B. C. his name had become a proverb for cruelty not only in Sicily, but throughout Hellas."

³⁸ Bentley, *Works*, London, 1836, vol. i, *Author's Preface*, p. xlix.

³⁹ *Ibid.*, vol. i, p. lxix.

⁴⁰ *Ibid.*, vol. i, p. lxix.

⁴¹ *Ibid.*, vol. i, p. 152.

⁴² *Ibid.*, vol. i, pp. 154-155.

⁴³ *Ibid.*, vol. i, p. 164.

⁴⁴ *Ibid.*, vol. i, pp. 168-170. Thericles is established as living at time of Aristophanes.

⁴⁵ Dr. Bentley places the first performance of Thespis twelve years after Phalaris' death. (p. 274.)

⁴⁶ *Ibid.*, vol. i, p. 361.

⁴⁷ *Ibid.*, p. 84.

⁴⁸ *Vide*, Bentley, *Works*, vol. iii, pp. 487-496. "Proposals for printing the New Testament." For an estimate of his editions of Classical Writers, *vide*, Jebb, R. C., *Bentley*, London, 1889, p. 136 *et seq.*

⁴⁹ Bentley, *Works*, vol. iii, pp. 303-4.

⁵⁰ Franklin, Thomas, *The Letters of Phalaris, an English Translation*, 1749. *Vide*, *Dedication*, quoted by Jebb, R. C., in *Bentley*, p. 81.

⁵¹ Stephen, Leslie, *Swift*, London, 1920, p. 13.

Swift served as the Secretary of Temple, almost continually from 1689 to Temple's death in 1699. *The Tale of a Tub* was probably written in 1696, and *The Battle of the Books* in 1697.

⁵² Temple, Sir William, *Essays*, Oxford, 1909, p. 18.

⁵³ Swift, Jonathan, *The Prose Works of*, London, 1911, vol. i, pp. 177, 183.

⁵⁴ Swift's brilliant mind perceived the mediocre quality of many highly praised literary compositions of his own day. The pretensions which authors of such made to an equality with the great writers of antiquity, seemed to him so absurd as to be humorous. It was a too keen feeling, not a lack of feeling, which inspired his satire.

⁵⁵ Budgell, Eustace, *Memoirs of the Life and Character of the late Earl of Orrery*, London, 1732, is an example.

⁵⁶ Three brothers, Peter, Martin and Jack, by their father's will inherit three coats with instructions as to their care and use. Their adventures with the garments form the story. *The Tale of a Tub* was an old title used by Ben Jonson and earlier writers long before Swift.

⁵⁷ Swift, Jonathan, *Prose Works*, London, 1911, vol. i, p. 12, "An Apology."

⁵⁸ *Ibid.*, vol. i, p. 36, "Dedication to Prince Posterity."

⁵⁹ In the Dedication, "Time" was regarded as the governor of Prince Posterity.

⁶⁰ *Ibid.*, vol. i, p. 38, "Dedication to Prince Posterity."

⁶¹ *Ibid.*, vol. i, p. 38.

⁶² *Ibid.*, vol i, p. 40.

⁶³ Swift is here satirizing the italics and small and large capital letters so often used in his period.

⁶⁴ *Ibid.*, vol. i, p. 44, "Preface."

⁶⁵ *Ibid.*, vol. i, p. 48, "Introduction." These wooden machines are the Pulpit, the Ladder, and the Stage itinerant.

⁶⁶ This was a London street near Moorfields, formerly much frequented by needy writers. It is now called Milton Street.

⁶⁷ This is understood to refer to William Wotton's *Reflections upon Ancient and Modern Learning*. Swift never tires of assaulting that author and Dryden; his animosity to the latter being due to the fact that "Cousin Dryden" had criticised his *Ode to the Athenian*

Society. One suspects, however, a deeper reason, as Swift did not usually resent fair criticism of his work. *Vide*, Stephen, Leslie, *Swift*, London, 1920, where many later events in his life prove him to have been magnanimous.

⁶⁸ *Ibid.*, p. 66, Section II. Also, "They were a race of men who delighted to nibble at the superfluities and excrescencies of books." (p. 74.)

⁶⁹ *Ibid.*, vol. i, p. 75.

⁷⁰ *Ibid.*, vol. i, section vii, "A Digression upon Digressions."

⁷¹ *Ibid.*, vol. i, pp. 103-105.

⁷² *Ibid.*

⁷³ *Ibid.*, vol. i, p. 116.

⁷⁴ *Ibid.*, vol. i, p. 117.

⁷⁵ *Ibid.*, vol. i, p. 127.

⁷⁶ *Ibid.*, vol. i, pp. 162-168.

⁷⁷ *Ibid.*, vol. i, p. 172.

⁷⁸ The heavy armed horse were epic poets; the light armed were lyric. Despereaux was another name for Boileau, the French poet who stood for the Ancients and against Fontenelle.

⁷⁹ *Ibid.*, vol. i, p. 176.

⁸⁰ John Scaliger was a noted French scholar of Italian origin who in the latter half of the sixteenth century endeavoured to form a critical chronology of the Ancient World.

⁸¹ It will be remembered that Bentley in Wotton's second edition of *Reflections upon Ancient and Modern Learning* had attacked the genuineness of *Aesop* as well as *Phalaris*.

⁸² This refers to the fact that Boyle had been assisted in his *Refutation* by Dean Aldrich, Dr. Atterbury and other learned persons at Oxford, among those termed the Christ Church Wits. See Bentley, R., *Works*, 1836, vol. i, Preface.

CHAPTER IV

¹ The Academy of Sciences was founded by Colbert in 1666. It suffered a slight decline upon his death in 1683, but underwent complete reorganization in 1699, receiving from the king the constitution under which it continued until its temporary dissolution in 1793. *Vide*, Fontenelle, *Oeuvres*, Paris, 1825, vol. i, pp. 3-76.

² Fontenelle, Bernard le Bovier de, *Oeuvres*, Paris, 1825, vol. i, pp. 1-2. Written at the reorganization of the Academy of Sciences, 1699.

³ Fontenelle, *Oeuvres*, Paris, 1825, vol. iv, pp. 1-85. English translation Hughes, John, London, 1708, *Fontenelle's Dialogues of the Dead*.

⁴ A critic of the early sixteenth century who attacked the increasing dominance of neo-classic rules.

⁵ Quaint John Hughes in his English Translation of the Dialogues (Hughes, John, *Fontenelle's Dialogues of the Dead*, London, 1708), remarks: "The compliment is finely introduced but smells strongly of the Pension." (p. 66.)

⁶ Fulvia quotes Augustus' order, terminating:

"'Tis War, she says, if I refuse her Charms.

Let's think — she's ugly — Trumpets sound to arms!"

⁷ The reader will perceive here the burlesque upon the exposition of Love by Diotima to Socrates in Plato's *Symposium*.

⁸ *Ibid.*, vol. iv, p. 64. (Hughes' Translation.)

⁹ *Ibid.*, vol. iv, p. 82.

¹⁰ *Ibid.*, vol. iii, *Entretiens sur la pluralité des mondes*. English translation, Gunning, Elizabeth, *Conversations on the Plurality of Worlds*, London, 1803. Fontenelle's *Histoire des Oracles*, Londres, 1785. Fontenelle, *Oeuvres*, Paris, 1825, vol. iv., *De L'Origine des Fables*.

¹¹ Fontenelle was profoundly influenced by Descartes, and it is probable that the "Vortex Theory" of that philosopher had inspired the train of thought producing his *Entretiens*.

¹² In modern phraseology, the Work was a bit of "propagandist literature," and probably effected a wider popularization of the new astronomical theories than any other single French treatise. For evidence of contemporary comment upon it, *vide*, De La Lande, Jerome, *Critical Account of the Life and Writings of the Author*, prefixed to *Conversations on the Plurality of Worlds*, London, 1803; Hughes, John, *Dialogues of the Dead*, *Preface*, London, 1708, p. xiii; Chamberlayne, John, the *Lives of the Philosophers*, *Dedication*, London, 1717. Temple, Sir William, *Ancient and Modern Learning*, 1690.

¹³ So pronounced in this conception, that one instinctively places Fontenelle's *Entretiens* as a background to Condorcets' important

Esquisse d'un tableau historique des progrès de l'esprit humain.

¹⁴ Fontenelle, *Oeuvres*, Paris, 1825, vol. iii, *Entretiens sur la pluralité des mondes*. English Translation, 1803, pp. 9-10.

¹⁵ *Ibid.*, pp. 15-16.

¹⁶ *Ibid.*, p. 71.

¹⁷ *Ibid.*, p. 113.

¹⁸ *Ibid.*, p. 150.

¹⁹ *Ibid.*, p. 58.

²⁰ *Ibid.*, pp. 128-129, "The Fifth Evening."

²¹ *Ibid.*, pp. 56-57.

²² Temple, Sir William, *Essays*, Oxford, 1909, p. 3, where he calls the "matter" "old and beaten."

²³ *Vide*, Fontenelle, Bernard, *Oeuvres*, Paris, 1825, vol. i, *Notice Historique*, by J. B. J. Champagnac, and De La Lande, Jerome, *Critical Account of the Life and Writings of Author*, prefixed to *English Translation of Entretiens*, London, 1803.

²⁴ Fontenelle, M. De, *Histoire des Oracles*, Londres, 1785. This book was first published in 1687.

²⁵ While Fontenelle includes all pagan oracles, his discussion is so saturated with references to the Greek as to make it inevitably a part of the present study.

²⁶ *Ibid.*, p. 1.

²⁷ Fontenelle, *Oeuvres*, Paris, 1825, vol. iv, p. 304.

²⁸ *Ibid.*, p. 302.

²⁹ *Ibid.*, p. 303.

³⁰ *Ibid.*, p. 310.

³¹ *Ibid.*, p. 310. In this treatise, as in *Histoire des Oracles*, the material of his investigation is largely drawn from the Greeks.

³² Under one cover appeared *Poésies Pastorales*, *Discours sur le Nature de l'Eglogue*, and *Digression sur les Anciens et les Modernes*. The *Poésies Pastorales* were designed to embody Fontenelle's conception of perfected verse, including the improvement of the Moderns upon the Ancients.

³³ Fontenelle, *Oeuvres*, vol. iv, pp. 235-6.

³⁴ Since *The Digression* is far too long to present in detail, the writer has here aimed not at literal translation, but at a faithful reproduction of salient thought.

³⁵ *Ibid.*, vol. iv, p. 238.

³⁶ *Ibid.*, p. 241.

³⁷ *Ibid.*, p. 246.

³⁸ *Ibid.*, p. 253.

³⁹ *Ibid.*, p. 254. In the same volume with *Poésies Pastorales* and *Digression* was published *Discours sur la Nature de l'Eglogue*, which discusses Fontenelle's idea of the rules of pastoral poetry and maintains that Theocritus and Virgil failed to measure up to a perfect standard, because their characters frequently express sentiments out of harmony with their capacity and environment. The scope of the present work forbids a reproduction of the long *Discours*; nor does it contain anything essentially new, or unimplied in the *Digression* which presumably was composed after the *Discours*.

⁴⁰ In 1725 Ramsay published his *Gentle Shepherd*; Thomson, *The Seasons*, 1726-30; William Collins, the *Odes*, 1746.

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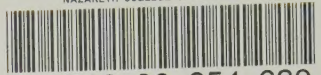
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